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## FROM THE EDITOR - Heather Dawson-Byrne

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### NURTURING NURSING RESEARCH

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This issue of the *Australian Journal of Advanced Nursing (AJAN)* marks the 19th year of publication. Over this period the journal has undergone substantial refinement to facilitate and complement the changes that have occurred within nursing.

It is to the credit of the Australian Nursing Federation - the journal publishers - that they have nurtured and supported so many nurse researchers, clinicians and academics during this 19-year period. There are many nurses within the country, myself included, who can say that they first published in *AJAN*.

Issue 19.1 introduces a new look cover and a new section titled *Research Roundup*. In addition to a brief synopsis of current research, this section will publish brief abstracts on theses completed by Masters or PhD students. *AJAN* is calling for the submission of suitable abstracts of newly completed theses that have importance for nursing for inclusion in future editions.

Within this issue Joan Harvey, Wendy Moyle and Debra Creedy describe the lived experience of women who had experienced early miscarriage. Their study demonstrated three major themes, the loss of the baby, the loss of the role of motherhood and the loss of hopes and dreams the women possessed for their baby. The authors recommend a number of changes to practice including the need for increased sensitivity toward women following early miscarriage.

The second paper, by Kim Usher, Joanne Tollefson and Dawn Francis, outlines a research project aimed at changing the levels of reflection of pre-registered nursing students in an Australian tertiary institution. These authors undertook a descriptive exploratory study using van Manen's (1977) levels in a structured way to facilitate the students' understanding of their level of reflection.

The findings of the study indicate that students' self-evaluation and identification of their levels can lead to change in the levels of critical reflective writing achieved by undergraduate students.

Alan Pearson and Mary FitzGerald describe a study commissioned by the Australian Nursing Council which sought to develop an approach to the maintenance of continuing competence in nursing that was broadly acceptable to all States and Territories of Australia. The results suggest that from a sample of 4,133 from all States and Territories, the most favoured approach was a signed declaration of competence for all nurses seeking annual relicensing, and the conduct of random competency audits by nursing regulatory authorities.

The fourth article, by Susan Helmrich, Patsy Yates, Robyn Nash, Alan Hobman, Valda Poulton and Lyn Berggren, describes a study that investigated nurses' beliefs and attitudes toward the use of non-pharmacological therapies as adjunct to current pain management strategies. Results suggested that nurses believe non-pharmacological therapies help in a hospital setting however there are significant barriers hindering their use.

In the final article Liz Hanna describes the results of a cross case exploratory study that used semi-structured, in-depth interviews to gather information about issues in rural nursing. Findings revealed that the nurses believed there were widespread problems because they felt that Government rural health strategies continued to overlook nurses' concerns regarding the nurse-practice environment. Her research indicated that the resignation of rural nurses and concomitant diminished health care delivery was a result of the frustration caused by this.

## GUEST EDITORIAL - SR CALLISTA ROY

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### REFLECTIONS ON NURSING: A TIME OF CHALLENGE AND CHOICE

It is indeed a privilege to share reflections on nursing in the distinguished *Australian Journal of Advanced Nursing*. My experience in nursing over nearly four decades tells me clearly that we have entered a time of momentous challenge and choice. The end of the 20th century saw unprecedented growth in nursing as a scholarly and practice discipline. Yet the era also saw a time of great turmoil in health care delivery and seemingly ineffective efforts by nurses to improve quality of care in many countries around the globe. Facing this paradox is a challenge with far reaching implications.

I believe that nursing is in a position to encounter a world in transition that is like no other time in history. In this encounter we can make decisions that create visions and actions to promote the future good of humankind integrated with the environment.

Let me provide some background for my position and more importantly provide some principles for visions and choices based on understanding the heritage of nursing within the expanding universe.

Growth in nursing has been particularly related to nursing knowledge development during the last decades of the 20th century. As a profession, nursing utilises specialised knowledge to contribute to the needs of society for health and well-being. Pearson, Vaughan, and Fitzgerald (1996) note between 1986 and 1996 'the enormity of nursing's scholarly development and the almost total transfer of undergraduate nursing education to the higher education sector in most countries' (Preface). Scholarly development increased understanding of the focus of nursing knowledge and of how to create knowledge for practice. Nursing literature, graduate education including doctoral programs, and professional conferences around the world reflect the maturing of the discipline. Particular progress was made in expanding philosophical perspectives and related methodological inquiry. The awareness of relevant sociopolitical commitments began to increase. As with the development of any discipline, advances in one area stimulate activity in another area and each time the spiral moves to higher levels.

This iterative interaction is particularly productive in nursing as a professional practice discipline. For example, nurses enter graduate education with burning issues from practice. In these programs modes of thinking are exercised that produce new insights into how to frame questions for research. Results of such thought and research are presented at conferences and in journal

articles, which in turn affect practice. Likewise, seminal articles in the literature both stem from and stimulate innovative thinking about practice. In scholarly developments and practice, nurses are sharing concerns about quality health care and the values underlying decisions made.

Increasingly nurses in practice and academic settings share understanding of the nature and focus of knowledge for practice (US Consensus Statement 1998). Also scholar-practitioners have been united in programs of research that provide an accumulated research base for practice. At the same time, however, the need for cost containment ushered in an era of health care reform. Taking the United States as an example, serious cost containment strategies have been in effect since the mid-1990s; still this country far exceeds all other nations in per capita health care spending. As a discipline with a social mandate, nurses are eager to take responsibility for social transformation. Yet when market-driven principles rule health care reform, it seems that the well-developed scholarly practice discipline of nursing has been ineffective in transforming health care systems. Possibly there is no time in history when the need for a nursing influence on the whole system of health care delivery has been more imperative and could be more far reaching.

Given the juxtaposition of these developments and challenges, it seems reasonable to look more deeply at the role nursing can play to transcend the current impasse in health care. Nursing has always responded to the challenge of promoting health within the demanding needs of society. Florence Nightingale initiated systems of care for soldiers suffering in deplorable conditions far from their home country and thereby transformed both the images of the soldier and of the nurse. Her further efforts led to more effective military and civilian hospitals in both England and India (Donahue 1985). Similarly Lillian Wald brought new ideas to the health problems of immigrants living in over-crowded tenements in New York City and established community-based nursing whereby patients had direct access to nurses and nurses to their patients. Wald also fought for legislative reforms to rectify the causes of poverty and became one of the most influential health workers of her day (Donahue, 1985).

How are the challenges of the 21st century uniquely related to those of the late 19th and early 20th century and those I and my colleagues of the nursing classes of 1963 (undergraduate) and 1966 (masters) faced? The 1960s are known as one of the most volatile and creative decades of the 20th century. O'Murchu (1995) notes that in 1960

alone 17 African nations freed themselves from colonialism and that during the decade student movements changed the influence of ruling classes of European and American universities. On television we discovered our world and saw the horror of poverty, hunger, and deprivation in a place called the Third World. We witnessed war, mourned the assassinations of our leaders, and saw men walk on the moon. Young people began to visit the global village and to take part in communal movements to correct injustice, including the Civil Rights movement in the United States.

On another level, science also was re-defining our world. Elsewhere I have written about how discoveries in quantum physics and cosmology in the last century opened new vistas for nurses to include in their worldview (Roy 2000). Much of the creative energy of the 1960s, according to O'Murchu (1995), was redirected into the emerging information technology. Additional human resources were expended as major institutions such as politics, religion, economics, and education responded to threats to the familiar with efforts to guard the stability and security of the status quo. In time these efforts seemed irrelevant and the current generation arrived at a time of transition in which the old securities are gone, but new possibilities are at best vague and ambiguous.

What we know is that the current changes in the life systems of the earth are so extensive that a major epoch is ending (Davis 1988; Swimme and Berry 1994). Our world and all the systems within it yearn for a whole new way of being and we will do well to listen to the unfolding story of our universe, a coherent narrative of the origin and emergent sequence of irreversible transformations of the universe and the planet earth.

During the 67 million years known as the Cenozoic era, expansive life processes developed on the earth. Humankind appeared late in the era without having an influence on the development of life forms. However, Swimme and Berry (1992) note that the next era will be different. We are entering a new period of creativity in which the entire Earth community will participate. Human choices can create a Technozoic or Ecozoic era. Corporate establishments use economic control to create the illusion of human progress and remedies for all ills. Meanwhile too many of us live in mega-cities, drive on clogged highways, with our vision impaired by pollution of the air, and are troubled by issues associated with technology such as genetic engineering. The authors note that the human cannot make a blade of grass, but 'there is liable not to be a blade of grass unless it is accepted, protected, and fostered by the human' (Swimme and Berry 1994). Creating an Ecozoic era that brings human activities on the earth into alignment with the patterns of creative balance of the earth requires a comprehensive human consensus. All human professionals need to see their prototype and their primary resource in the integral functioning of the

earth community. For nurses in particular, who are educated to promote human and environment integration, this is a time of challenge and choice to be leaders in recreating the face of the earth.

The patterns of the creative universe provide basic themes from which to derive principles and values to guide human responsibility in the unfolding changes. Although authors use different words, I will call the basic themes diversity, unity, and self-identity. Swimme and Berry (1994) note that there has never been a time when the universe did not seek further diversity and they note the concern of biologist E.O. Wilson that we seem to be bringing about the greatest threat to the abundance and diversity of life on earth. Further, the essential unity of all things is seen in quantum theory. Bohn notes that 'quantum concepts imply that the world acts more like a single individual unit, in which even the 'intrinsic' nature of each part (wave or particle) depends to some degree on its relationship to its surroundings' (Briggs and Peat, 1984, p.95). Likewise, Swimme and Berry (1994) note that cosmogenesis is organised by communion: 'To be is to be related, for relationship is the essence of existence' (p.77). Within community the earth fosters self-identity. Every person and every thing is unique to self and expresses its own interior being, its self and its mystery. All of creation is made whole by individuals expressing who they are.

Nursing today faces the challenge of making the choices to lead the human community to healthy person and environment integration. Its principles, values and action plans will be based on the themes being discovered in the universe, those that have worked to evolve our current world and that will work to create the next era, one of diversity, unity, and self identity. Transforming worldwide systems according to these principles will take the kind of creativity and commitment seen in Nightingale and Wald. I believe nurses today have these abilities along with new knowledge and visions of the scope of the challenge before them to transform the life-sustaining systems of the earth.

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# WOMEN'S EXPERIENCE OF EARLY MISCARRIAGE: A PHENOMENOLOGICAL STUDY

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## ABSTRACT

**This paper describes the experience of three women who had experienced early miscarriage within the previous 12 months. Three major themes of loss emerged: the loss of a baby, the loss of the role of motherhood and the loss of the hopes and dreams the women possessed for their baby. These losses were complicated by the women's negative thoughts about the care they received while in hospital, their perceptions of health professional's negative attitudes, the lack of information given to them, and the lack of understanding shown by family and friends about their situation. The authors recommend a number of changes to practice including the need for an increased sensitivity towards women following early miscarriage.**

## INTRODUCTION

**M**iscarriage, also known as spontaneous abortion, occurs before the legal age of life viability of 24 weeks gestation (Niven and Walker 1996). The rate of early miscarriage is thought to be approximately 30% at four weeks gestation, and 20% between four and 13 weeks gestation (Rajan and Oakley 1993). The incidence of early miscarriage is difficult to ascertain because many women may be unaware they are pregnant or interpret blood loss as a heavy period. In addition, it has been estimated that nearly 80% of all conceptions end in fetal death, the majority of these occurring without the knowledge of the woman (Rajan and Oakley 1993).

Thus, it appears that early miscarriage is a common event. This is supported by statistics collected at one Brisbane, Australia, hospital which revealed that 440 women in one year were hospitalized for surgical procedures related to first trimester miscarriage (Jacobs and Harvey 2000).

The importance of pregnancy loss is evidenced by an increase in research on the experience of stillbirth and late pregnancy loss (Boyle 1997; Gilbert and Smart 1992). However, in spite of aspects of fetal and neonatal loss being reported in the midwifery literature there still remains a paucity of research on the woman's experience of early miscarriage. Furthermore, the available research fails to focus on the psychosocial consequences and the social context of early miscarriage.

The lack of attention to the emotional aspects of care is also reflected in the medical management of early miscarriage. Often the woman is admitted to hospital to undergo the surgical procedure of dilatation and curettage (D and C) to remove any remaining products of conception (Hull et al 1997). Unless there are complications, the woman is discharged home after a couple of hours. Thus, the care given focuses on the physical management of the woman and implies that this is all that is required. Little if any consideration seems to

be given to her emotional wellbeing. The short hospitalisation and early discharge may in fact be a major contributing factor to this apparent lack of concern.

## THE PSYCHOLOGICAL IMPACT OF MISCARRIAGE

It is clear that the focus on community health care will continue to encourage early discharge of women following miscarriage. This is not just an Australian phenomenon. Hemminki (1998) for example, explored the Finnish health service for medical management of miscarriage and the rationale for practice. He concluded that many countries treat women as outpatients or encourage management by the woman's family doctor.

It is apparent that there is a lack of emphasis on how a woman feels about early discharge following miscarriage and a lack of concern for the emotional after effects of miscarriage.

There are, however, studies available that suggest that miscarriage has an emotional impact on the woman. A study that investigated the psychological impact of miscarriage (Neugebauer et al 1992) reported that women were in a highly symptomatic depressed state at six weeks and at six months after miscarriage. Similar findings have been supported in other studies of depression following miscarriage (Beutel et al 1995; Prettyman et al 1993).

Beil (1992) reported the presence of symptoms consistent with psychological trauma following miscarriage. Her study revealed that women experienced higher levels of current subjective distress than did men. The level of distress was positively related to the length of pregnancy and increased as the pregnancy advanced. Further studies have uncovered the poor effect of pregnancy loss on women (Ney et al 1994; Prettyman et al 1993; Rajan and Oakley 1993).

Bourne and Lewis (1991) displayed a lack of regard for emotional well being following early miscarriage. They suggested that grief following miscarriage should not be magnified and that it should not be considered as a serious loss.

In contrast, Mander (1994) contended that instead of belittling the grief that women experienced following miscarriage, society should accept the women's loss for what it means to them. Thus, even in the literature there is dissension in how society views early miscarriage and its effects on the woman. However, in spite of indications that miscarriage may have an emotional impact on the health of a woman, (Beutel et al 1995; Neugebauer et al 1992; Prettyman et al 1993) they are still likely to undergo early discharge and are just as likely not to receive any form of counselling following miscarriage.

## The need for the study

The literature highlights the importance placed on the medical care of women and the limited focus on the psychosocial consequences and the social context of early miscarriage. It seems dismissive for research to ignore the very person who is affected by miscarriage - the woman. The researchers contend that early miscarriage must be explored from a phenomenological perspective, as the experience of early miscarriage is an important issue in nursing care and the key to care is understanding the experience (Morrison 1994). As the event of miscarriage is a unique experience to each woman (Bansen and Stevens 1992) a phenomenological study would address the perceived limitations of previous studies. Furthermore, such a study would subsequently benefit women who have a miscarriage by providing the opportunity for understanding and the potential for changes in nursing practice. Thus, the following study set out to explore women's experience of the phenomena of early miscarriage.

## METHODOLOGY AND METHODS

A descriptive phenomenological approach (Husserl 1970) informed the exploration of the phenomena of early miscarriage. The researchers adhered to the definition of early miscarriage as being the loss of a foetus occurring up to 16 weeks gestation (Murphy 1998).

A major feature of phenomenology is the recognition that experience is the essential meaning of knowledge (Husserl 1970). Thus, the authors turned to the women's experiences to find out what it was like to live the experience of early miscarriage. The researchers were interested in the world as experienced from the participant's perspective. To avoid any bias and in keeping with the phenomenological tenet of bracketing (Husserl 1970), assumptions about miscarriage derived from experience and the literature were made clear in a written statement to remind the authors of the need to lay aside assumptions during data collection and analysis.

## The participants

A purposive sample of women who had experienced early miscarriage was sought. The purpose of selecting participants for a phenomenological study is not to meet statistical requirements but to demonstrate variation in the description of the experience (Munhall and Oiler 1986). The most essential aspect was that the woman had experienced early miscarriage and to ensure a ready recall of the experience, women who had experienced a miscarriage within the last 12 months were asked to participate. Participants were sought through an advertisement in a local Brisbane newspaper. The advertisement described the study and asked participants to contact the researcher (Harvey). Seventeen women

responded to the advertisement, however only three women meet the criteria of having experienced an early miscarriage within the last 12 months. Fourteen of the women had experienced their miscarriage more than 12 months ago. The researcher made arrangements to meet individually with the three women in a convenient place. All three women chose for the researcher to visit their home rather than attend a local clinic. To maintain confidentiality the women were given the pseudonyms of Chris, Sue and Ann.

### **Chris**

Chris was a 24-year-old married laboratory technician who had recently taken up residence in Queensland. Chris had never experienced a live birth. Her first, and only experience of pregnancy, ended in miscarriage at six weeks gestation.

### **Sue**

Sue, a 38-year-old housewife had given up work temporarily to devote more time to her young son who was at school. She had experienced 10 pregnancies with only one resulting in the live birth of her son. The other nine had ended as early miscarriages. Her most recent miscarriage had occurred at 11 weeks gestation.

### **Ann**

Ann aged 35 years, was the wife of a local teacher, a regular church attendee and a full-time mother to two young boys. Ann had experienced five pregnancies resulting in two live births and three miscarriages, with her most recent one also occurring at 11 weeks gestation.

Although each of the women had experienced early miscarriage it was felt that they also demonstrated variation in their experiences. It was anticipated that these three women would describe their subjective awareness of the phenomena to share a common understanding and to reveal the essence of the lived experience of early miscarriage.

The initial meeting with the researcher gave the women the opportunity to have their questions about the study answered, to receive a written and verbal description of the study and to read and sign an informed consent form. It also gave the women the opportunity to get to know the researcher and to hopefully feel comfortable talking with her. Following this, a date and time for the subsequent interview was arranged.

The women were assured that confidentiality would be maintained at all times through the use of a pseudonym for any subsequent publications or presentations and that the interview recordings and transcripts would only be available to the researchers. Ethics approval was obtained from the Griffith University ethics committee.

## **DATA COLLECTION**

Open ended, unstructured individual interviews were conducted with the women in their homes. Initially participants were asked to 'Tell me about your experience of miscarriage'. The women were asked to expand on their initial abstract descriptions and to provide more formal definitions of their experience. Additional questions were asked when necessary to gather these more formal descriptions and for further clarification. When the participants felt that they had described their experience and no further clarification was needed the interviews were considered to be complete. Each of the interviews lasted approximately one hour. The interview was audiotaped with permission of the participant. This enabled the researcher to capture the description as told, thereby ensuring accuracy of the data collection and enabling her to engage with the interview rather than concentrating on note taking.

## **DATA ANALYSIS**

Following verbatim transcription of each interview the transcripts were compared with the audiotapes for accuracy. Colaizzi's method was used for data analysis (cited in Valle and King 1978, p.59-61). Colaizzi's method was chosen as it is consistent with the phenomenological bracketing of held assumptions and is a method of analysis that has been shown to be valid and reliable by other phenomenological nurse researchers (Munhall and Oiler 1986).

This method involved the researcher becoming immersed in the descriptions of the experience. The researcher read the transcripts to gain understanding and clarification, while intuiting or wondering about the phenomenon under investigation in relation to the various descriptions generated by the three women. Significant statements about miscarriage were extracted from each transcript. The next step was to formulate meanings from each significant statement. The formulated meanings illuminated what each participant revealed about their experience. The researcher then sought to cluster the meanings into themes. Finally the themes were integrated into a description of early miscarriage. This paper presents a description of early miscarriage and discusses the emerging themes.

### **Credibility**

Comparing the transcripts with the tapes enhanced credibility. Furthermore, one of the authors, experienced in phenomenological research also reviewed the transcripts and assisted with data analysis. Reliability and validity were addressed throughout the collection and analysis of data. Confirmability and dependability of the results were achieved by comparing the findings with the

transcripts, the researcher's diary of the interviews and with the existing literature.

## FINDINGS - A DESCRIPTION OF MISCARRIAGE

Early miscarriage was perceived as a major event in the lives of the three women. This event symbolised the loss of a baby, the loss of the role of motherhood and the loss of the hopes and dreams the women possessed for their baby. This perceived loss brought feelings of grief, distress, pain and prolonged sadness as the women attempted to understand what was happening in their lives at that time. The perception of loss created emotional conflict and turmoil, which was conceived as overwhelming grief and distress.

The experience of miscarriage was negative as the women experienced fear and panic associated with a lack of understanding of what had happened to them. They sought explanation from those around them and they experienced disappointment when they perceived that those they believed would assist them did not provide the explanations and reassurance they so desperately sought. They experienced disappointment and frustration as a result of this lack of reassurance. Feelings of uncertainty and guilt engulfed them as they sought reassurance from their fears through their own explanation of what had caused their miscarriage.

This was not experienced as relief, but rather they became distressed as they recognised that health professionals were not able to help clients such as themselves who were experiencing distress after miscarriage. In fact, further distress was generated as they recognised that health professionals kept their distance to avoid confronting the situation.

Furthermore, feelings of isolation and loneliness were experienced due to the perceived inability of friends and others to enable the women to talk about their experience of miscarriage. Their attempts to speak about their experience were greeted with silence. Attempts to understand why they could not recount their experience resulted in feelings of isolation as they attempted to justify their actions. They felt comfort from the perception that their friends' actions were normal for people who had never experienced miscarriage. However, they continued to try to understand people's reactions and attitudes to their miscarriage. They experienced feelings of distress and isolation, as they perceived that they would never understand these reactions and believed that people who had not miscarried would never understand them.

In addition, the distress and pain experienced raised concerns about subsequent pregnancies. The women feared becoming attracted to the idea of pregnancy in case

they faced the loss of another baby, but at times they were preoccupied with thoughts of wanting another child.

## THE THEMES DISCUSSED

### Loss

The feeling of loss is an understandable feeling for a woman who has recently lost a baby. The torment and conflict felt by these women has been recorded in other studies. For example, Ney et al (1994) concluded that the loss experienced from early miscarriage produced internal conflict for women, which could lead to depression if left unresolved.

The loss of motherhood is an interesting concept to consider and one, which some individuals may find hard to understand when women miscarry early. For example, Chris experienced the loss of motherhood as significant. Her pregnancy gave her meaning and an understanding of motherhood. Although this was her first pregnancy, Chris felt she was a mother from the time of conception. Following her miscarriage, she immediately perceived the role of motherhood had gone and her life no longer held meaning for her. Moreover, she felt she and her husband were not accepted by society as a family unit because they had no children, but rather that they were a married couple. Sue and Ann also perceived a loss of motherhood. For them, being pregnant gave meaning to being a woman and a family unit. The loss of their baby brought confusion to their understanding of their world, a world that no longer held them to be pregnant mothers.

Feelings of being abandoned between the world of motherhood and non-motherhood were also common in other studies (eg Brown 1997; Moulder 1995). In spite of the importance of motherhood to these women they perceived that the world around them had also forgotten them as mothers.

### Uncertainty

The women described their concern and uncertainty about further pregnancy. The emotional pain and distress that they experienced left them feeling inadequate and without meaning in their lives. They perceived a lack of confidence and questioned their ability to ever bear children. This was in spite of two of the women (Sue and Ann) having previously borne live children. They began to explain their losses as being somehow related to their inadequacies. Thus, they perceived that they were to blame for their loss and that they were being punished. These findings are supported by Mander (1994), Gilbert and Smart (1992), and Koziol-McLain et al (1992) who also found that following early miscarriage, women became worried about conceiving again and their complacency about bearing children was shattered, making them feel vulnerable and a failure.

The strength of these uncertain feelings is demonstrated in Chris' grief reaction to her miscarriage. Her uncertainty was so dominant she perceived she would not be able to emotionally survive another miscarriage and as a result, she lost confidence in herself and her ability to 'manage' the world. She experienced emotional turmoil as a result of what she described as 'swinging feelings'. She described feeling normal for a while and then she felt as though she came crashing down as she felt her feelings swing to the other end of the pendulum where she experienced extreme distress and emotional unrest. It was during these times, at the low end of the pendulum, when she felt the need to be alone to reflect on the perception of her loss. She came to believe that she was 'not a nice person' and that was why the miscarriage had occurred. She experienced feelings of confusion as she tried to understand why the miscarriage should happen to her. Unable to understand the experience she again concluded that it was her fault.

### **Guilt**

The feeling that they were to blame was a common perception among the three women. The women experienced guilt feelings about their miscarriage believing they had done something to cause it or that there was something physically wrong with them. They felt they needed to find a reason for their miscarriage and believed the guilt lay with them, as after all they acknowledged that they were the incubators of the foetus. These persistent feelings of guilt made the women experience doubts about themselves and their ability to give birth. This led to further anguish and distress as they continued to blame themselves for their predicament. Nikcevic and Kuczmierczyk (1999), Koziol-McLain (1992) and Bansen and Stevens (1992) identified similar findings.

### **Clinical care**

A major theme of importance was the meaning the women gave to their clinical care. There were many clinical issues that the women perceived to impact negatively on them and which they felt subsequently affected their recovery. They perceived that they did not receive adequate information at the time of their experience of miscarriage. They believed this hindered their recovery, as they did not know what to expect. Furthermore, they perceived that this made them feel disempowered as they felt they had no control over their lives. It is interesting to note that even Sue who had experienced nine early miscarriages perceived that she had not been placed in control of her situation as she felt that information was kept from her.

Findings from other studies concur with these feelings (eg Nikcevic and Kuczmierczyk 1999; Boyle and Chapman 1997; Moulder 1995; Cecil 1994; Moohan et al

1994). These researchers found that medical staff did not discuss the cause of miscarriage or what to expect as a result of miscarriage and did not offer advice about available community help.

The women also perceived that health care professionals did not care or appreciate what they were experiencing. They believed that health professionals were only concerned about the physical aspects of their care and that they stayed distant from them so that they did not have to listen to or try to understand the women. The women perceived that this demonstrated a lack of care and concern for their wellbeing.

Friedman and Gath (1989) argue that it may be that health care professionals appear uncaring and ignore the emotional aspect of the miscarriage experience because of the brief time such women spend in hospital. Moreover, Murphy (1992) stated that the uncaring, distant approach adopted by health care professionals might be the only way in which they can cope with the intensely emotional situation. Keeping a distance from such women is of particular importance to nursing practice as caring has been described as the very essence of nursing and the central, unifying focus for nursing practice (Leininger 1984) and as such can not be offered from a distance.

Nurses throughout history have been considered as care givers. If nurses in particular are not considered to be caring the very basis of nursing practice is at threat. As a practice discipline, nursing is based on the interaction between nurse and client. A caring relationship sets a condition of trust that allows appropriate care to be offered. It is imperative that in order to ensure appropriate help an understanding of client's beliefs and needs is required.

### **Need for emotional support**

Rajan and Oakley (1993) suggest that it is necessary for mourning to be recognised as a natural, healthy, although painful process and that health care professionals should facilitate this process. Health care professionals should be aware of their vital role in helping women with their experience of early miscarriage and must inform the women of community support available to them.

The women in this study perceived they received emotional support from their partner but believed that their partners could only offer nominal support, as they did not fully understand the depth of their experience. The participants acknowledged their partner's feelings and experiences, but believed their partners did not suffer in the same way as they as a woman suffered following early miscarriage.

There is limited research on how early miscarriage impacts on partners of women who experience miscarriage (Murphy 1998; Puddifoot and Johnson 1997; Johnson and

Puddifoot 1996). These researchers suggest that men are affected by miscarriage and they report a complex set of thoughts and feelings and confusion about their role and expected behaviour. They conclude that men feel they have to ignore their own feelings to help their partner through the miscarriage. Further research on the emotional needs of women and of their partners may be necessary in order to understand the counselling requirements of both groups.

Family members also offered support to the women, however, some failed to offer support or to acknowledge that the miscarriage had occurred. This led to feelings of isolation and loneliness, which the women perceived, hindered their recovery. The women rationalized this behaviour by stating that only women who had experienced early miscarriage could understand their feelings. This perceived lack of understanding also led to hurtful comments being made while attempting to provide consolation. These comments only served to diminish and trivialise their loss.

Such feelings are further complicated by research (Gamlin 1995) that argues that people do not know how to help women in this situation, and yet offers no solution to combat this problem. If people cannot provide support, women will become isolated and lonely, believing that there is no one available who can help them.

The women in this study experienced a lack of support because they perceived that people were reluctant to talk about their experience. The lack of recognition of the difficulties experienced by women made miscarriage an experience that the women had to endure by themselves. They perceived the predominant societal view was that if a woman miscarried there was something wrong with the baby and that she could easily conceive again. This led to a silence from society that the women resented. They felt people viewed miscarriage as a medical complication of pregnancy rather than the loss of a dearly desired baby. Thus, the emotional aspects of their circumstance were avoided by society as a means of helping society adjust to a situation that is seen to be related to a foetus rather than an actual baby. Unless the unborn foetus is valued by society it may be difficult to challenge and to change such thoughts.

## **IMPLICATIONS FOR NURSING PRACTICE**

The findings highlight a number of areas that require consideration by the nursing profession. Many of these issues have been highlighted in similar literature. For example, Reed's (1992) study revealed that obstetric nurses felt that women who experienced early miscarriage did not require much emotional support. Furthermore, the nurses rated the emotional seriousness of miscarriage to be higher if the gestational age of the pregnancy was older

and therefore, priority of care would increase. Moreover, Rajan (1994) found that health care professionals did not provide sufficient support for women following early miscarriage. In addition, Bansen and Stevens (1992) noted that hospital staff had either a positive or negative effect on women's recovery from early miscarriage and any avoidance behaviour by staff could impede the mourning process. In light of the findings from the authors' research and the literature, it is important that nurses caring for women following early miscarriage ensure that they receive appropriate holistic care, rather than care that is focused only on the physical aspects of care.

Holistic care is defined as recognizing that 'health care proceeds from a balance of physical, spiritual, psychological and social needs' (Patterson 1998). Thus, the provision of health care must be explored from all perspectives. Furthermore, the caring relationship must reflect emotional wellbeing as well as physical care. Psychological care must become visible so that women feel their emotions are understood and attended to within a therapeutic environment. As these women are in hospital for such a short time frame it is suggested that the assignment of a primary care nurse may encourage an emotional commitment to care. Emotional support might also carry on if care is continued once women are discharged into the community. However, this study also raises the implication of early discharge for people requiring psychological support following early miscarriage. This issue requires further investigation.

This study supports giving women the opportunity to speak with health professionals during their hospitalisation as well as to receive an explanation of miscarriage to avoid the constant battering of their self-esteem. In addition it is argued that they should also be offered a follow up telephone call by nursing staff as a means of support while providing the opportunity to listen and to help overcome their tragedy. In the immediate future, it may be useful if women received information brochures about what to expect following miscarriage and that they be offered counselling from within the hospital and the community.

To assist these women it is imperative that health professionals show sensitivity to the women's needs to encourage perceptions of a caring response. Nursing care should allow provision for women to voice their feelings and concerns, to enable an acknowledgement of their loss. For this to occur there needs to be an emphasis in nurse education on the importance of providing emotional support, displaying empathy and using therapeutic techniques such as touch and massage to help emotional and physical healing.

In addition to caring for women, support is also required for the partners of women who suffer early miscarriage. As discussed earlier, there is limited research

on how miscarriage impacts on partners of women who experience miscarriage (Murphy 1998; Puddifoot and Johnson 1997; Johnson and Puddifoot 1996). This area would benefit from further research.

## FURTHER RESEARCH OPPORTUNITIES

This study has uncovered a need for further investigation in relation to early miscarriage and in particular to the needs of women and their partners. Furthermore, it would be beneficial to re-interview these women in 12 months time in order to see whether time has helped to heal them.

It is apparent that early miscarriage has not received adequate attention in both the literature and the education of nurses. Although nurse education focuses on the importance of the therapeutic relationship it appears that the limited hospitalisation periods experienced by these women may reduce the opportunity for therapeutic communication. This raises the need to explore and to make recommendations for nurse education on the process of improving therapeutic communication, particularly when patients undergo short hospital stays.

## CONCLUSION

This study found that the experience of early miscarriage was a major event in women's lives. The women perceived that no one understood the emotional upheaval of their situation. They believed that family, friends or society did not consider the experience of miscarriage as the loss of their hopes, dreams and their motherhood role. They perceived their feelings were brushed aside as being of little significance as the foetus at this stage was not considered to be a 'baby'. The emotional turmoil experienced by these women after many months demonstrates the importance of the establishment of a therapeutic relationship.

This study provides an understanding of the early miscarriage experience from the perception of the woman. This perception is extremely important to nursing practice, as it is nurses who are caring for such women during their limited hospitalisation period. This field of study has received little attention in the past.

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# MOVING FROM TECHNICAL TO CRITICAL REFLECTION IN JOURNALLING: AN INVESTIGATION OF STUDENTS' ABILITY TO INCORPORATE THREE LEVELS OF REFLECTIVE WRITING

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**Key words:** levels of reflective writing, reflective practice, teaching strategies, nursing education, preregistration nursing students, journalling

## ABSTRACT

This paper outlines a research project aimed at changing the levels of reflection of preregistration nursing students in a tertiary institution. Whilst reflection is widely espoused now in nursing, few studies have been found that identify whether the level of reflective writing can be identified or developed by students. Anecdotal and research evidence (Powell 1989; van Manen 1977) however indicates that most student reflective writing occurs at the technical level. A descriptive exploratory study using both qualitative and quantitative techniques was undertaken to apply van Manen's (1977) levels in a structured way in an attempt to facilitate the student's understanding and use of the levels in their reflective writing. The findings of the study indicate that student self evaluation and identification of the levels in their own writing can lead to change in the levels of critical reflective writing achieved by undergraduate students.

## INTRODUCTION

The context of nursing has changed in the last decade (Chaska 1990; Maloney 1992; McCoppin and Gardner 1994; Sutton 1996). Advances in nursing and medical knowledge are expanding rapidly and there is a need for increased expertise and confidence with technology in nursing care. Reduced government funding and technological advances have led to a reduction in hospital beds, shorter hospital stays and more rapid patient turnovers. As a result, workers in health care institutions spend much of their time dealing with acutely ill patients requiring specialised care.

As a consequence of the turnover, health care needs in the community have increased. In both situations nurses need higher level acute care skills, the capacity to think for themselves and a predisposition to continue learning in order to stay abreast of technological, medical and health advances. To add to this, the focus is now on the health care consumer (Maloney 1992; Wass 1994), illness prevention, health promotion and community involvement in care which add new dimensions to the work of nurses. In addition, Kim (1993) claims that nursing faces a new era that requires fusing and synthesising knowledge for its application.

Within this climate of increasing role complexity and time of rapid change, much is being written about the need to redefine education (Atkins and Murphy 1993; Casey 1995; Wong et al 1995). The antiquated 'training' can be viewed as closed and final. It is narrow in scope and application and, as Casey (1995) points out, it can produce efficient technical nurses but this is not enough to meet the needs of societal changes and tends to lead to uncritical application of practice (Glenn 1995) in contexts that require different ways of knowing (Meleis 1991),

particularly in a multicultural society. Because of the complexity of practice in terms of knowledge and knowledge production, it is evident that nursing needs to develop a method of inquiry that involves practitioners in the inquiry (Kim 1999).

Reflective practice and the notion of questioning of taken for granted assumptions which underpin that practice has been widely advocated as a way of working with complex and changing work contexts (Atkins and Murphy 1993; Wong et al 1995; Kim 1999).

We define reflection as a process leading to new understanding of:

- action situations;
- self as nurse in terms of the cultural milieu of the health care system;
- taken-for-granted assumptions about nursing practice and rituals;
- ways of committing to improvement in safe and competent practice; and,
- ways of challenging practice.

Reflection should lead to action which is better informed than that which occurred before the reflection (Francis 1995). Such a definition does not deny the importance of competent technical skills. Rather, it seeks to extend understanding of these across changing and complex contexts.

The goal of reflection is seen as challenging the established and habitual patterns of expectation and long taken-for-granted meaning perspectives. Mezirow (1981) makes a distinction between non-reflection (habitual action), reflection (thoughtful action which selectively reviews prior learning rather than appraise or reappraise it) and critical or premise reflection (challenging the validity of presuppositions in prior learning). James and Clarke (1994, p.84) describe the process of reflection as that which 'elevates the actions of the reflective practitioner above those of the technical expert'. However, they recognise problems inherent in the teaching and assessment strategies and the complex, intangible nature of reflection with its lack of control of learning outcomes by the educator. It is the problem of how educators can support and validate this move from technical to reflective which was the focus of this study.

### **Journalling and reflective practice**

Journalling has been advocated for the development of reflection and learning in educational settings (Holly 1984; Boud, Keogh and Walker 1985; Francis 1995; Usher et al 1999). Fulwiler (1987) claims that the more people write the better they learn. Of all modes of language use, writing is the most powerful for developing sustained critical thought. It is writing that makes our thought

visible, laying it open for us to modify, extend, develop or critique.

Callister (1993, p.185) applies this learning through journalling specifically to nursing stating that journals are an effective tool to develop 'the human science of nursing in contrast to the reductionist biomedical model of health care delivery'. Further, she outlines other benefits such as opportunities to define and articulate links between theory and practice with a focus on lived clinical experience, the development of sustained critical thought by increasing conceptual clarity and increased ability to empathise, observe and describe. Francis' (1995, 1997) work with pre service teachers indicates that journalling aids the personal construction of knowledge when students are explicitly taught to question the ways they give meaning to university course work, lived experience and culturally embedded beliefs and values.

Both Francis (1997) and Patterson (1995) see benefits in the educator dialoguing privately with students through journal writing. These benefits include expanding the students' understanding of the entirety of the experience and increasing ability to articulate that which they did not know they knew. Through journalling, students are able to investigate their own thinking and understanding, revisiting it over time to challenge values and attitudes.

### **Levels of reflection**

While a number of models of levels of reflection have been proposed (see for example, van Manen 1977; Mezirow 1981; Kim 1999) we chose the model proposed by van Manen (1977) as it was considered more easily adaptable to nursing due to our knowledge of both the model and van Manen. Van Manen (1977) puts the levels forward as (i) the technical level where the application of knowledge is for the purpose of attaining a given end; (ii) the theoretical or practical level where it is realised that any choice requires a process of analysing and clarifying individual and cultural experiences, meanings, perceptions, assumptions and prejudgments, and (iii) the critical level where the practical addresses itself, reflectively, to question the worth of knowledge and the nature of social conditions.

This level involves a constant critique of domination and repressive forms of authority, and pursues self-determination on the basis of justice, equality and freedom (van Manen 1977, pp.226-227). In this study, students were told to consider each level as follows: the technical - what did I do, how did it work, how can I improve it?; the theoretical - linking previous theories from the literature and forming personal theory; and critical or moral ethical - the macro issues of good for whom and good for what, for example, who will be advantaged/disadvantaged here?

However, even though a number of writers have put forward models of levels of reflection, we could not locate any studies that indicated that levels of reflection can be identified or evaluated by students, that changing of the levels of reflective writing is possible, or that changing the level alters the meaning given to professional practice. What does seem to be apparent, however, is that reflective journal writing tends to include writing that mostly meets the criteria of the technical level of writing (Powell 1989; van Manen 1977). Therefore, the purpose of this study was to investigate beginning nursing students' understanding and ability to use the different levels of reflective writing (technical, theoretical, critical) by involving them in self-evaluation of their own journaling using the framework developed by van Manen (1977), and to determine whether the level of reflective writing could be changed as a result of involving the students in self-evaluation of their level of reflective writing.

## METHODS

### Design of the study

A descriptive exploratory study was undertaken to explore the following objectives:

- to describe the levels of reflective writing using students' initial reflective writing;
- to explore whether students can assess their own writing to determine their levels of reflective writing;
- to explore whether the level of reflective writing can be changed (from technical to critical) by engaging students in self-evaluation of their reflective journal writing using van Manen's (1977) framework;
- to assess what is different about those students with the greatest amount of change in their level of reflective writing when compared to those who evidenced little, if any, change in their level of reflective writing.

### Subjects

All undergraduate nursing students in their first year at a regional Australian university were invited to take part in the study. Thirty-eight out of a possible 150 volunteered. From the 38, only 15 complete data sets were included in the study. Of the 38 students, 11 volunteered to be interviewed at the end of the study.

### Procedure

Initially, all first year students were assisted to evaluate a piece of reflective writing using van Manen's (1977) framework for levels of reflection. Once all students in each tutorial group appeared to master this task, the students were then encouraged to evaluate their own journal writing using the same framework. Students would practise this each week in allocated class time

with the tutor available for assistance if confusion arose. Students were also encouraged to assist each other with this activity. Three times during the semester (weeks 3, 6 and 9), the journals of those students who volunteered to take part in the study were collected and analysed by the research team.

The levels of reflection in each journal were determined using van Manen's (1977) framework as provided to the students and counted using a different colour highlighter for each level. That is, sentences and paragraphs were individually considered against van Manen's (1977) framework and highlighted in the colour assigned to the particular level (eg yellow for descriptive writing). Counting words and sentences in each colour and assigning a score then made an estimation of the amount of writing representative of each level. Individuals were then allocated a score representing each level of reflective writing by determining an estimated percent of the writing that demonstrated the characteristics of the levels. Non reflective material, for example information about the subject, and personal issues were excluded from the data.

The quantitative data obtained were analysed using percentages only as the data sets were considered insufficient for any further statistical analyses. Individuals were then allocated a score representing each level of reflective writing. This score was then entered into the data set. No other information was gathered from the journals which were then promptly returned to the students.

After the three data sets had been collected, students who had volunteered for the first part of the study were asked to volunteer to be interviewed as part of a focus group. The focus group questions related to the students' experiences during the study. Eleven students who volunteered to take part in the focus groups were sorted into two groups representing those who had demonstrated the most change and those who had demonstrated the least change. The qualitative data were analysed using content analysis.

### Ethical implications

Ethical clearance to conduct the study was obtained from the relevant human ethics review board. Students were provided with an information sheet that described the study and volunteers were required to sign a consent form. The students were reminded of their right not to take part in the study, and their right to withdraw at any time. All information collected from the study was maintained and stored in accordance with ethical guidelines.

## FINDINGS

Students appear to be capable of evaluating their own reflective journal writing using a framework of levels of reflection as indicated by the results. The assessment of the students' journals by the research team indicated that the students rarely made a mistake in their assessment of the level of their reflective writing. The initial level of

**Table 1: Student levels of reflection at three points of time across the semester**

	Week 3	Week 6	Week 9
Level I Descriptive	34.9%	39.1%	37.2%
Level II Theoretical	26.5%	27.8%	19.6%
Level III Critical	4.8%	5.7%	10.5%

N.B. The percentages for each week do not make 100% as material that was not reflective was not included in the data set.

reflective writing evident in most students work was at the technical level. This was as expected.

Table 1 indicates that the descriptive writing increased overall and critical reflective writing increased steadily across the three data sets indicating that the students did change their level of reflective writing with constant self-evaluation. However, the theoretical level of reflective writing clearly decreased across the data sets.

While this was in contrast to what was initially expected (ie that theoretical and critical levels of reflection would increase), perhaps it can be explained as an artefact of the small data set.

However, an analysis such as this that averages scores across the group does not allow for individual differences, therefore an examination of individual data sets was carried out. When this was done we discovered a group of students who appeared to have evidenced little, if any, change in their reflective writing. Within this group were two categories: those who came into the study with an existing high level of theoretical or critical reflective writing, and those who came with low levels of theoretical or critical reflective writing and demonstrated little, if any, change as a result of the study.

The findings from the focus group interviews were also interesting to note. The difficulty in sorting the different existing abilities of the students was a confounding variable. The students demonstrating the most change in levels of reflective writing appeared to value writing as a reflective strategy, could link the usefulness of reflective writing to the practice setting, showed they took ownership of their reflection, could see it as a useful learning tool, and demonstrated a personal level of questioning.

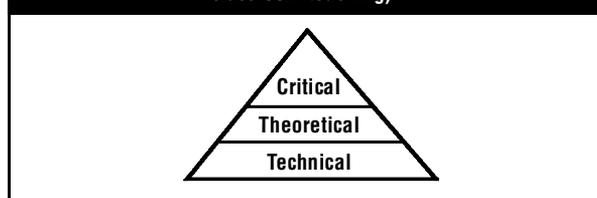
For example, these students made comments such as 'I can see this benefiting my nursing practice' and 'this has helped me to think in a different way when I'm writing'.

In contrast, those students from the least change group saw the process at a technical level 'of what works', constructed writing as something over which the tutor was the arbitrator, considered the reflective writing as the end point rather than as a process of personal development, were procedure oriented and focussed on what and how to write, expressed concern with privacy which led them to constantly censor their writing, and had difficulty seeing an application of critical reflection in the clinical setting. For example, these students made comments such as 'I try to write the way they [the tutor] wants me to' and 'I don't write what I want because it will be read by the tutor' and 'I don't see how this will benefit my practice in the future'.

## DISCUSSION

It appears that by focussing on a search for levels of reflective writing over time, the students developed a consciousness of the differences between technical, theoretical and critical reflective writing. It is also evident that students are capable of changing their level of reflective writing by utilising self-evaluation and a suitable framework (eg van Manen 1977) in which to write. Although Kim (1999) has been able to demonstrate this with experienced registered nurses as part of a group exercise with the advantage of a facilitator, we believe this is the first time this has been demonstrated with undergraduate nursing students. This is interesting as there is a dearth of strategies available to assist undergraduate students and new practitioners to learn how to become reflective.

**Figure 1: van Manen's (1977) framework of reflection explained by use of a triangular diagram (as used in classroom teaching)**



In addition, it also seems apparent that the students perceived the tutors as valuing the critical reflective level more highly in a hierarchical or tiered way. There are several possible explanations for this. The visual presentation of the levels of reflection as a triangle with the critical at the apex suggests that it is more highly valued.

Because we talked about 'lifting of levels' during our explanation of the framework and intention of the study, that also indicated a valuing of the critical level. This may have overshadowed any talk of integrating all three as of equal importance and how all must be nurtured and practised in order to enhance personal professional development.

What we cannot determine from the results of this study are: (i) the ability of students to transfer this increased awareness to the clinical context, and (ii) whether any claims can be made regarding students' predisposition to reflective thinking and how this might have influenced the results.

### Limitations and lessons learnt

One limitation was that the students self-rated their journal writing. This must be taken into account when considering the results of this study. However, the research assistant did review all journal entries and student assessments of the levels of reflection. Further, it is possible that the results may indicate that the students wanted to please their tutors and thus wrote the very things they knew their tutors were seeking (Cameron and Mitchell 1993; Wellard and Bethune 1996). Other researchers attempting to unravel this important phenomenon have faced this problem.

In addition, a great deal of time was expended by the class tutors in assisting students to identify their levels of reflective writing even though only 38 students volunteered for the study. Unfortunately, it was difficult to sustain the enthusiasm of the tutoring group which may have accounted for some of the students who did not complete all of the requirements thus making their data unusable.

The main limitation, however, was the time frame for the project. A very complex process was undertaken over a 10-week teaching period which was necessitated because of clinical placements. In further studies, attempts should be taken to ensure that a much longer period is available for this process to be adequately assessed. Further, the study made no attempts to explore the transfer of this skill to the clinical setting, nor to examine the impact of age, culture, gender, or previous experience on the levels of reflective writing.

The study was also limited by the number of students who volunteered to take part and the final number of data sets available for the researchers' analysis. This meant that more sophisticated statistical analyses were not possible. More research needs to be done to confirm or refute the trends identified in this research.

Finally, the researchers started out believing that it would be possible to identify the 'change/no-change' groups without taking account of the prior skills existing in both writing and reflective thinking. This was perhaps the major learning that occurred within the research group.

### Recommendations for further research

The study needs to be replicated with a larger sample for any valid claims to be made. Also entry writing and reflective skills have to be thoroughly explored to establish a comprehensive baseline so that 'change/no-change' can be explored and explained in more depth.

Concurrent, ongoing assessment of critical thinking and transfer to action may be useful. Exploration of age, culture, gender and previous experience would also be useful.

Before any claims can be made about the impact of this strategy of developing reflective writing, and transfer to the clinical scene can be made, a further study needs to be undertaken that follows the students into the clinical setting to determine if any change to clinical practice occurs.

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# A SURVEY OF NURSES' VIEWS ON INDICATORS FOR CONTINUING COMPETENCE IN NURSING

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**Key words: nursing, regulation, competency indicators, continuing competence, professional licensing**

## ABSTRACT

The study, commissioned by the Australian Nursing Council Inc. (ANCI), sought to develop an approach to the maintenance of continuing competence in nursing broadly acceptable to nurses in all States and Territories and included the conduct of a postal survey of registered nurses (RNs) throughout Australia. An options booklet and accompanying questionnaire were posted to a random sample of 2% of RNs from all States and the Northern Territory in Australia. The sample consisted of 4,133 RNs and 1005 completed questionnaires were returned representing a 24.3% response rate. Data were analysed using SPSSX. The results suggest that respondents most favoured the introduction of a signed declaration of competence for all nurses seeking annual relicensing and the conduct of random competency audits by nursing regulatory authorities.

## INTRODUCTION

A study to identify indicators of continuing competence in nursing was commissioned by the ANCI in 1997 and carried out in 1997/1998. This project set out to solicit views and expert opinion from the nursing profession, related bodies and the literature and to develop generally agreed indicators to inform the profession and its regulatory bodies.

The objectives of the study were to develop:

- a statement of indicators of continuing competence in nursing;
- an explanation of the basis for each of the identified indicators;
- a description of any boundaries, contexts, applications or qualifications which apply in respect of each indicator; and,
- recommendations for any further action or research.

The study design was based on four key stages:

- Stage 1: detailed project planning and identification of appropriate competency indicators;
- Stage 2: data analysis and development of pilot instruments;
- Stage 3: testing indicators within the Australian context; and,
- Stage 4: development of an options booklet and a national survey of RNs.

This paper reports on the national survey of RNs in Australia undertaken in Stage 4 of the study.

## BACKGROUND

There exists an extensive literature on the development and adoption of various methods and systems for assessing initial competence and monitoring continuing competence in the professions (Blair and Ramones 1998, Bondy et al

1997, Andrews and Bujack 1996, Anderson 1994). However, besides anecdote and local evaluation, there is little evidence to suggest that any method is better than another. No profession appears to have found a definitive answer to the issue of continuing competence - one that is reasonable to administer, reliable and acceptable to the profession.

The review of other professions shows that there is intensive interest and a great deal of activity directed at monitoring continuing competence among most professions (Cady et al 1998; Borko et al 1997; Cross 1997; Chambers et al 1996; Bradley 1993). The issue is clearly taken seriously by these professions although none appear to have achieved greater success than nursing in developing an effective system.

Nursing has been advancing in this area both internationally and nationally and has made more progress in the past decade than many other professions both in Australia and in the rest of the world, however considerable work remains to be undertaken in this area. The *raison d'être* for the establishment of regulatory bodies for the profession is to protect the public through restricting practice to those who are deemed to be competent.

Throughout Australia there are a number of different licensing approaches to ensure competency of nurses. These are summarised in Table 1.

One aspect of this study endeavoured to address some of the competence and recency of practice issues by ascertaining the views of nurses on the provision of evidence of competence and ongoing professional development by conducting a survey of randomly selected nurses from throughout Australia. This article addresses this aspect.

## METHODOLOGY

### Survey design: Development of an options booklet and a survey of nurses

The objective of Stage 4 of this study was to develop a comprehensive user-friendly Options Booklet produced to publishing house standards. In addition, a structured postal questionnaire was developed to seek the responses of a sample of RNs throughout Australia, on the refined pilot instruments - referred to as Optional Instruments - described in the booklet. The design of the booklet was based on data collected during Stages 2 and 3 of the study, including responses received during a one-day expert panel meeting. The booklet was further modified in the light of the feedback from the Project Management Committee.

The booklet (including questionnaire) was mailed to a stratified random sample of 2% of the total RN population. The study focussed on continuing competence in nursing in relation to all nurses, who were licensed, however styled, by a regulatory authority in any State or Territory of Australia. This therefore included RNs and ENs. Because of the timeframe and scope of the study, the survey was limited to RNs but other licensed nurses were involved in other components of the study.

The detachable double-sided questionnaire forming the last page of the booklet sought the views of nurses on the current approach taken by their State or Territory registering authority in renewing annual practising certificates. Nurses were also asked to rank the six Optional Instruments according to their ability to:

- provide evidence of continuing competence to regulatory bodies; and,
- provide evidence of professional development.

**Table 1: Summary of relicensing approaches**

	Payment of fee only	Payment of fee and requirement for recency	Payment of fee: requirement for recency and self declaration	Payment of fee: requirement for recency: self declaration and random audit
New South Wales	■			
Australian Capital Territory		■		
South Australia		■		
Western Australia		■		
Northern Territory		■		
Victoria			■	
Queensland				■
Tasmania				■

Optional Instruments were rated from 1-6 (with 1 being the most preferred and 6 being the least preferred). Other data collected in the questionnaire included State or Territory of residence, age, and highest educational qualification. The questionnaire comprised six questions, three of which pertained to socio-demographic data.

### Piloting of survey

The questionnaire was piloted on six clinical nurses from a variety of backgrounds and required only minor changes in light of their comments.

### Sampling

The publishing house standard booklet was printed and distributed to a random sample of 2% of RNs in each State and Territory (except the Australian Capital Territory [ACT]). Eight of the responses recorded an ACT address on the response sheet. We are not able to fully explain this but it may be that these respondents reside in the ACT and hold a licence in New South Wales. We have treated these responses separately in the analysis. Table 2 represents the number of questionnaires posted State by State.

State	Questionnaires posted
New South Wales	1,400 (33.8%)
Queensland	748 (18%)
Victoria	900 (21.7%)
South Australia	460 (11.1%)
Tasmania	125 (3.1%)
Northern Territory	69 (1.6%)
Western Australia	431 (10.4%)
<b>Total</b>	<b>4,133 (100%)</b>

It was not possible to include ACT nurses because legislation in the ACT prohibits the nursing regulatory authority from releasing the names and addresses of nurses on the register or to mail out materials on behalf of researchers or other bodies.

### Distribution

The team liaised with the respective regulatory authority in each State and Territory and all (apart from the ACT) agreed to access their databases on behalf of the team and to create a random sample of RNs. Each authority printed labels and dispatched questionnaire booklets on their arrival from the project office. Each package sent to RNs around Australia contained the Options Booklet (colour coded to provide demographic

data and an indication of response rate from each State and Territory surveyed) and a self-addressed reply paid envelope. Although the consultants stipulated that the booklet be sent to RNs it appears that some booklets were sent to Enrolled Nurses (ENs) with a total of 62 responses from ENs. The data from these nurses have been included in the analysis.

### Data analysis

Of the 4,133 questionnaires distributed via the random sample 1005 were returned representing a 24.3% response rate. Although this is a poor response rate, it is comparable with response rates of most randomised surveys of RNs in Australia. Why RNs are so reluctant to participate in surveys related to the development of nursing is not clear. Data were analysed using the SPSSX software package.

## RESULTS

Frequency and mean scores for each of the questions in the booklet were calculated and the results follow:

### Question 1

*Do you think that the current approach taken by your State or Territory Nursing Registering Authority to renew your annual practising certificate addresses the profession's need to guarantee the competence of registered nurses?*

Region	Total (n)	Yes (% of valid responses)	No (% of valid responses)	Unanswered
ACT	8	1 (14.3)	6 (85.7)	1
NSW	223	59 (28.1)	151 (71.9)	13
NT	27	4 (16.7)	20 (83.3)	3
Qld	182	98 (61.3)	62 (38.8)	22
SA	125	52 (45.2)	63 (54.8)	10
Tas	47	20 (46.5)	23 (53.5)	4
Vic	343	132 (41.9)	183 (58.1)	28
WA	50	16 (34.8)	30 (65.2)	4
<b>Total</b>	<b>1005</b>	<b>382 (41.5)</b>	<b>538 (58.5)</b>	<b>85</b>

Responses to this question (58.5% n=538) indicated that the nurses surveyed did not feel that the current approach taken by their State or Territory addresses the profession's need to guarantee the competence of RNs. The only State in which the majority of nurses felt that the current approach did address the need to guarantee the

competence of RNs was Queensland (61% n=98). It should be noted that Queensland had introduced a system for registration that required self-declaration of competency and a random audit of those who make such a self-declaration, prior to the conduct of this survey.

In **question 2** participants were asked to:

*Rate the options in order of preference from 1-6 (with 1 being most preferred, and 6 being the least preferred) in terms of their ability to provide evidence of continuing competence to regulatory bodies.*

The options being:

- **Optional Instrument A:** The payment of an annual fee only.
- **Optional Instrument B:** The provision of evidence of competence based on an ANCI competency questionnaire.
- **Optional Instrument C:** The submission of a professional portfolio.
- **Optional Instrument D:** A combination of Options B and C the provision of evidence of competence based on an ANCI competency questionnaire and the submission of a professional portfolio.
- **Optional Instrument E:** Signing a legal declaration annually (based on the document currently used by the Queensland Nursing Council).
- **Optional Instrument F:** Verifying recency of practice.

As all valid responses rated each option from 1-6, a mean score gives perhaps a better indication of the respondents overall belief in the Optional Instrument's ability to provide evidence of continuing competence. To determine the most preferred option, the mean scores for each option were calculated (lower scores indicating more preferred) and analysed using one-way analysis of variance with Student-Newman-Keuls post-hoc analysis to determine significant differences between the options (Pagano, 1986).

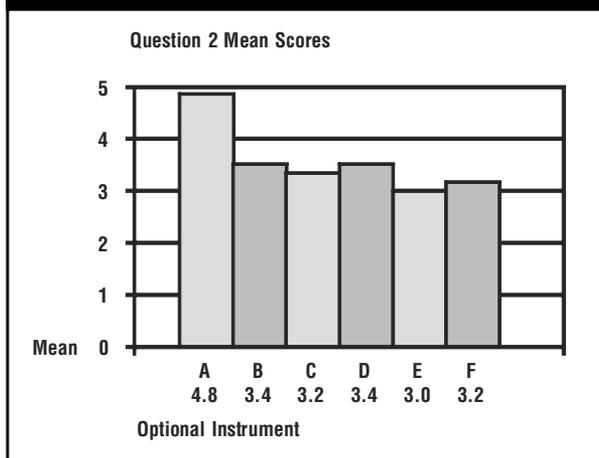
In terms of mean score, Optional Instrument E was the most preferred option, having a significantly lower mean score (3.0) than all other options. Optional Instruments C and F were not significantly different from each other, and were the next most popular options. Optional Instrument's B and D also were not significantly different from each other, and were the next most popular options, while Optional Instrument A was clearly the least popular.

The mean scores ( $\pm$ SD) indicate that respondents, in order of preference ranked the Optional Instrument in the following order of preference (lower scores indicating more preferred see figure 1).

### Question 3

*Rate the options in order of preference from 1-6 (with 1 being most preferred, and 6 being the least preferred) in*

**Figure 1: Most preferred option for providing evidence of continuing competence to regulatory bodies (lower scores indicate most preferred)**

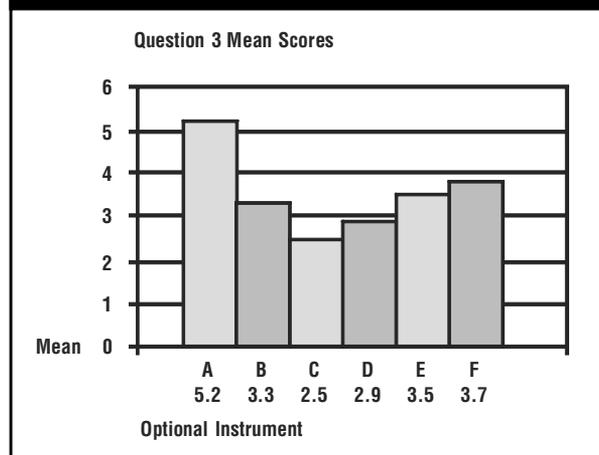


*terms of their ability to provide evidence of professional development.*

Once again the mean score was used to provide an indication of the respondents overall belief in the options ability to provide evidence of professional development. For this question, all options were significantly different from each other, with Optional Instrument C the most preferred, followed by Optional Instruments D, B, E, and F. Optional Instrument A again was clearly the least preferred. The mean scores ( $\pm$ SD) indicate that respondents, in order of preference listed the Optional Instruments as follows:

1. **Optional Instrument C** Mean score 2.55 (1.46)
2. **Optional Instrument D** Mean score 2.86 (1.73)
3. **Optional Instrument B** Mean score 3.31 (1.21)
4. **Optional Instrument E** Mean score 3.46 (1.29)
5. **Optional Instrument F** Mean score 3.66 (1.53)
6. **Optional Instrument A** Mean score 5.15 (1.68)

**Figure 2: The most preferred option for providing evidence of professional development (lower scores indicate most preferred)**



## Mean scores, Questions 2 and 3 by State

When the mean scores were analysed State by State the pattern is different to the aggregated data analysis. In relation to Question 2, nurses from the ACT, New South Wales and the Northern Territory preferred Optional Instrument C in terms of its ability to provide evidence of continuing competence. Queensland nurses preferred Optional Instrument E, whilst South Australian and Tasmanian nurses preferred Optional Instruments F and B respectively.

In terms of the Optional Instrument's ability to provide evidence of professional development, the mean scores by State show that all states preferred Option C.

## Questions 4-6

*These questions related to age, state currently residing and highest nursing qualification.*

42.8% (n=424) of those surveyed had as their highest qualification a hospital certificate. 17.9% (n=177) had graduate certificates or diplomas and 3.6% (n=36) were masters qualified. 0.5% (n=5) were doctoral prepared.

All nurses, regardless of highest qualification rated Optional Instrument A (fee only) as least preferred (by frequency) in both questions 2 and 3. Of the most preferred option in Question 2, hospital certificated RNs most preferred Optional Instrument F (recency of practice declaration and fee) whilst ENs preferred Optional Instruments E (legal declaration) and F and doctorally prepared RNs preferred Optional Instrument C (professional portfolio). All other RNs preferred Optional Instrument D (combination model) as best able to provide evidence of continuing competence to regulatory bodies.

Of the most preferred options in Question 3, ENs preferred Optional Instruments D (combination model)

and F (recency of practice and fee). In contrast, all RNs, with the exception of hospital certificated nurses, preferred Optional Instrument C (professional portfolio) as providing the best evidence of professional development. Hospital certificated RNs preferred Optional Instrument D (combination model).

When grouped by age all nurses least preferred Optional Instrument A in both questions 2 and 3. However there were differences with regard to age and most preferred options in both questions 2 and 3.

## DISCUSSION

It was clear from the survey that the majority of nurses around Australia (with the exception of Queensland) do not believe that the current approach taken by their State or Territory addresses the profession's need to guarantee the competence of RNs. It was also clear that the option of a fee only was not seen as having any utility in terms of that option's ability to either provide evidence of professional development or evidence of continuing competence.

When examining the most preferred option two approaches were taken: the mean scores were calculated based on the ranking from 1-6 of each option; and the outright number of most preferred scores of each option (1 of 1-6). The legal declaration based on the document currently used by the Queensland Nursing Council (Option E) is the preferred option when rated by mean overall score in terms of its ability to provide evidence of continuing competence. However, Optional Instrument D (combination model) was ranked as the most preferred option in terms of frequency.

It was interesting to note that the only State where the majority of nurses surveyed (61.3%) believed that the

**Table 4: Preferences by qualifications**

QUALIFICATIONS	n	Question 2		n	Question 3	
		Most preferred	Least preferred		Most preferred	Least preferred
EN (all)	54	E, F	A	59	D, F	A
EN (Higher Cert/AssDip)	4	F	A	4	F	A
RN (all)	822	D	A	857	C	A
RN (Hosp Cert)	384	F	A	393	D	A
RN (Dip/Degree)	248	D	A	262	C	A
RN (GradCert/GradDip)	153	D	A	163	C	A
RN (Masters)	32	D	A	34	C	A
RN (Doctorate)	5	C	A	5	C	A

**Table 4: Preferences by qualifications**

Age group	n	Question 2		n	Question 3	
		Most preferred	Least preferred		Most preferred	Least preferred
19-25	36	D, E, F	A	38	C	A
26-35	187	D	A	195	C	A
36-45	339	D	A	355	C	A
46-55	227	F	A	238	C	A
56+	80	D	A	84	D	A

current approach taken in their State/Territory addressed the profession's need to guarantee the competence of RNs was Queensland.

Optional Instrument C was clearly favoured (using both approaches outlined above) by the nurses surveyed regarding its ability to provide evidence of professional development.

## CONCLUSION

In Australia nurses have collectively indicated their preference for providing evidence of competence and professional development. However, when the data is analysed State by State we can see that no clear consensus emerges regarding their preference for providing evidence of competence, but there is consensus for providing evidence of professional development.

The authors suggest that nurses consider the following course of action as an appropriate one for nurses in Australia.

- the introduction of a requirement for nurses to submit a signed legal declaration of competence annually when applying for re-licensing;
- the introduction of a random auditing process by nursing regulatory authorities as a quality assurance process;
- that nurses should be free to respond to the auditing process using a format selected by the nurse;
- that the professional development component of auditing is the legitimate role of nursing professional associations; and,
- the development of a strategy to encourage nursing professional associations to assist nurses to develop approaches to assure nurses, and regulatory bodies, that they can legitimately sign a declaration of competence.

In light of the proposed policy developments suggested above, State and Territory regulating bodies could then:

- introduce a requirement for nurses to submit a signed legal declaration of competence annually when applying for re-licensing;
- introduce a random auditing process by nursing regulatory authorities as a quality assurance process; and,
- develop a policy, which supports the view that nurses should be free to respond to the auditing process using a format selected by the nurse.

In addition the Australian Nursing Federation (ANF); Royal College of Nursing, Australia (RCNA); the New South Wales College of Nursing (NSWCON); and other generalist nursing organisations could be invited to develop portfolio designs, workshops and guidelines for nurses to support them to develop professionally and to satisfy the requirements should they be audited.

It would also be appropriate that the ANCI; State and Territory nursing regulatory authorities; the ANF; RCNA; the NSWCON; and other generalist nursing organisations consider these recommendations and generate informed debate in nursing, the health care system and the community to promote continuing competence in nursing.

## RECOMMENDATIONS FOR FURTHER RESEARCH

Whilst the preferred option relies on a process of self-declaration of competence, it is linked with a process of audit by regulatory authorities to monitor the ability of self declaration to identify nurses who have not taken reasonable steps to maintain their continuing competence. The authors recommend that further research is needed to evaluate the policies, and processes once developed and implemented. Additionally, an examination of the support provided to nurses with regard to professional development, documentation of development as well as identifying barriers that prevent nurses from maintaining competence should be undertaken.

Although nursing in Australia and internationally is at the forefront of development with regard to determining issues of competence and professional development, there clearly remains a significant amount of work to be done.

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# FACTORS INFLUENCING NURSES' DECISIONS TO USE NON-PHARMACOLOGICAL THERAPIES TO MANAGE PATIENTS' PAIN

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**Key Words: non-pharmacological therapies, pain, nurses, holistic care**

## ABSTRACT

This study investigated nurses' beliefs and attitudes toward the use of non-pharmacological therapies as adjunct pain management strategies. Registered nurses (RNs) (n=37) from the medical, surgical, oncology/palliative care and critical care areas of two Australian hospitals participated in a series of focus group discussions that explored the use of non-pharmacological therapies to help manage patients' pain in a hospital setting. Results from the discussions identified that nurses believe non-pharmacological therapies offer several advantages to the management of patients' pain and general well being. For example non-pharmacological therapies were recognised to be useful as adjuncts while waiting for medications to take effect. However significant barriers such as lack of organisational and professional support were also identified as hindering nurses' current usage of non-pharmacological therapies. Further investigation of the key issues from this study is recommended to improve non-pharmacological pain management and enhance patient outcomes.

## BACKGROUND

There is considerable literature relating to the prevalence and severity of pain amongst hospitalised patients (Najman 1993; Donovan, Dillon and McGuire 1987; Melzack et al 1987), with some studies suggesting that up to 75% of patients experience moderate to severe pain and that in many cases this pain is not relieved adequately (Miaskowski 1993; Agency for Health Care Policy and Research (AHCPR) 1994; Donovan et al 1987).

Unrelieved pain may result in distress and suffering (AHCPR 1994; Havily et al 1992; Rankin 1982; Mayer 1985; Ward et al 1993), decreased ability to participate in activities of daily living (DePalma and Weisse 1997; Rankin 1982; Ward et al 1993), decreased patient satisfaction and increased health care costs (AHCPR 1994).

Traditionally, pain management tended to emphasise the use of pharmacological agents. However, pain is influenced by an array of physical and psychosocial factors, and patients differ in their response to pain and to analgesics. Therefore, it is important to have a range of options, including non-pharmacological therapies available, in order to manage patients' pain most effectively. Guidelines produced by the World Health Organisation (WHO) and the Agency for Health Care Policy and Research (AHCPR) recommend the inclusion of non-pharmacological therapies for pain, where appropriate, to ensure optimal pain control is achieved (AHCPR 1994).

Despite the persistence of unrelieved pain and the potential benefit of using non-pharmacological therapies to help relieve pain, an under-utilisation of non-

pharmacological therapies by nurses managing patients' pain has been identified in the literature.

Chart audits carried out by Clarke et al (1996) confirmed that 90% (n=82) had no documented evidence of the use of any non-pharmacological interventions to relieve pain. Similarly, in a study by Dalton (1989), although nurses had knowledge about non-pharmacological therapies, only 25% reported actually implementing them in practice. Ferrell et al's (1990) study of decision-making by RNs for patients in pain also found that non-pharmacological pain treatments were used by the respondents in only 6% of the patient situations.

This documented under-utilisation of non-pharmacological therapies for pain management raises questions and the need to understand the factors influencing the use of such therapies in a hospital setting. The purpose of this study was to examine nurses' perceptions of the use of non-pharmacological therapies for the management of pain, and to identify factors that influence nurses' usage of these therapies.

## METHODOLOGY

This study involved a series of focus group interviews with RNs from two metropolitan hospitals in Brisbane, Australia. Focus group interviews are a recognised qualitative research approach carried out using a small targeted group who are led in a discussion about a topic

**Table 1: Nurse focus group demographics (n=37)**

Gender	n	%
Female	35	95
Male	2	5
Years of practice		
Two years or less	3	8
2.1-5 years	5	14
5.1-10 years	9	24
10.1-20 years	11	30
Greater than 20 years	9	24
Area of practice		
Medical/surgical	19	51
Oncology/palliative care	11	30
Critical care	7	19
Level of employment		
Registered Nurse (level 1)	15	41
Clinical Nurse (level 2)	16	43
CNC/Educator (level 3)	6	16

that is central to the research investigation (Krueger 1988). This research approach was selected as an appropriate method to gather qualitative data on the factors that may influence nurses' usage of non-pharmacological therapies as adjunct pain treatments.

## Participants

RNs from the medical/surgical, oncology/palliative care, and critical care areas of one private hospital and one public hospital were invited to participate in the focus group discussions. A total of 37 nurses participated in the discussions. As shown in Table 1, the majority of these were female (94.6%), and had been nursing for more than 10 years (54%). The focus groups were held in locations identified as convenient by the participants from the various clinical settings. The sessions were also scheduled at a time of day (during the handover period between day and evening shifts) which enabled nurses to participate in the discussions with the least interruption to their clinical work. Participation in the focus group discussions was voluntary and anonymity was assured.

## Data collection

Three focus groups were held at each of the two participating hospitals (one for nurses from each of the clinical specialities targeted in this study). Each focus group ran for approximately one hour and was audio taped with participants' permission. A member of the research team who was also a staff member at the given hospital moderated the sessions. Trigger questions, used as a basis for the discussion, were developed by the research team using the PRECEDE model of health behaviour (Green 1980). This model identifies key factors influencing health behaviour (here, nurses' use of non-pharmacological therapies) to be predisposing, enabling, and reinforcing. *Predisposing factors* such as beliefs, attitudes, values and perceptions facilitate or hinder a person's motivation to perform the desired behaviour. *Enabling factors* include the skills and resources necessary to perform the behaviour. *Reinforcing factors* comprise the feedback provided by people such as co-workers, doctors, and patients that influence the continuance or discontinuance of the behaviour. Examples of the trigger questions are shown in Table 2.

Participants were also asked to complete a brief demographic questionnaire that asked for information including years of nursing practice, level of employment, and types of non-pharmacological therapies used in the past 12 months.

## Data analysis

The audio recordings of each focus group discussion were transcribed verbatim. Two research team members ('primary analysts') independently analysed three of these transcripts to identify key recurring themes related to the

**Table 2: Nurse focus group trigger questions**

1	Some nurses choose to use treatments that are non-pharmacological to help manage patients' pain. What do you know about these non-pharmacological therapies?
2	Tell me about the times when you chose to implement non-pharmacological therapies to manage pain. What prompted you to implement these therapies?
3	Tell me about the times when you chose not to implement non-pharmacological therapies for pain. What made you decide not to implement them?
4	How do you think people felt about you implementing non-pharmacological therapies?
5	What do you believe are the benefits/advantages of implementing non-pharmacological therapies?
6	What do you believe are the limitations/disadvantages of using non-pharmacological therapies?
7	What needs to happen to encourage the appropriate use of non-pharmacological therapies for managing pain?

main components of the PRECEDE framework. After meeting together to discuss their results, a list of tentative themes was developed. The remainder of the research team then reviewed these themes after they had read the same three transcripts. Some minor revisions to the codes were made to clarify definitions and labels of the themes. The resultant list of themes was then used to re-code the original three transcripts and code the remaining three transcripts. Of the remaining three transcripts, one each was coded by the two 'primary analysts' and the third by both 'analysts' to check for coding consistency. Correlation between the coders' analysis of the last transcript showed a high degree of consistency with the application of the coding schemes.

## RESULTS

### Extent of use of non-pharmacological therapies

Analysis of the demographic questionnaire indicated that 89.2% of the participating nurses reported that they had previously implemented non-pharmacological therapies to manage hospitalised patients' pain. Previous classifications of non-pharmacological therapies as **physical** (eg massage), **cognitive behavioural** (eg relaxation) (AHCPR 1994), or **meridian/energy-based** (eg therapeutic touch) (Clavarino and Yates 1995), were applied to group the therapies previously used by the focus group participants. Results showed that physical modalities were used most commonly (41%). These were closely followed by cognitive/behavioural therapies (38%) and to a much lesser extent meridian/energy based therapies (15%). A small percentage (5%) of therapies used (eg creating a calm environment, giving patients

**Table 3: Non-pharmacological therapies used by nurses**

Therapy used (n=138*)	n	%
Massage	22	16
Relaxation	19	14
Distraction (eg music)	18	13
Heat	16	12
Counselling/education	11	8
Cold	10	7
Aromatherapy	7	5
Reiki/therapeutic touch	7	5
Acupuncture/acupressure/reflexology	7	5
Touch	5	4
Imagery/visualisation	5	4
Positioning	4	3
Other	7	5
<b>Number of nurses (n=37) who had implemented one/more non-pharmacological therapy for pain management.</b>	<b>33</b>	<b>89</b>

(\* Multiple therapies used by some nurses)

control) were classified as 'other'. Table 3 provides a complete list of the reported non-pharmacological therapies previously used by focus group participants to manage patients' pain.

### Factors influencing the use of non-pharmacological pain therapies

Positive and negative factors identified by nurses as influencing their decisions and ability to use non-pharmacological therapies are presented in Table 4. In the discussion that follows, the dominant issues from the interviews are described in more detail incorporating examples from the data to illustrate the issues more clearly.

#### Predisposing factors

Factors that may predispose an individual to engage in a particular behaviour include knowledge, attitudes, values and perceptions (AHCPR 1994). In the present study, nurses described several beliefs about pain and pain management that may influence their decisions concerning whether or not to use non-pharmacological therapies.

#### Beliefs about the nature of pain

A majority of participants identified that pain is multi-dimensional and that using non-pharmacological therapies, in combination with medications, offers a more

**Table 4: Positive and negative factors influencing nurses' use of non-pharmacological therapies (NPT)**

PREDISPOSING FACTORS	POSITIVE FACTORS	NEGATIVE FACTORS
Beliefs about the nature of pain	<ul style="list-style-type: none"> <li>• NPT treat multidimensional aspect of pain</li> <li>• Psychosocial benefits of NPT</li> </ul>	
Beliefs about the benefits of NPT	<ul style="list-style-type: none"> <li>• Overall improvement to patients' pain</li> <li>• Increases nurses' 'quality' time with patients</li> <li>• Enhances nurse/patient relationships</li> <li>• Offer patients' a sense of control over pain</li> </ul>	
Commitment to NPT		<ul style="list-style-type: none"> <li>• Lack of priority given to NPT</li> <li>• Lack of continuity with NPT administration</li> </ul>
ENABLING FACTORS		
Time	<ul style="list-style-type: none"> <li>• Nurses' time saved through improved patient status and satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• Nurse's lack of perceived time to implement NPT</li> </ul>
Knowledge and skills	<ul style="list-style-type: none"> <li>• Nurses have basic knowledge and skills for administering 'basic' therapies</li> </ul>	<ul style="list-style-type: none"> <li>• Nurses' lack expert knowledge and skills for administering complex therapies</li> <li>• Lack of consistent level of knowledge and skills may lead to haphazard administration of NPT</li> </ul>
Organisational support		<ul style="list-style-type: none"> <li>• Lack of priority placed on NPT</li> <li>• Conflicting ability for nurses to implement NPT independently</li> <li>• Lack of hospital policy and guidelines</li> <li>• Lack of professional endorsement</li> <li>• Difficulties associated with medical model</li> <li>• Nurses lack of authority to administer NPT</li> </ul>
REINFORCING FACTORS		
Patient attitudes		<ul style="list-style-type: none"> <li>• Patients socialised to expect pharmacological pain relief not non-pharmacological</li> </ul>
Health professional attitudes	<ul style="list-style-type: none"> <li>• Acceptance of anecdotal evidence supporting NPT usage</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of scientific evidence supporting NPT usage</li> <li>• Lack of support from nursing peers</li> <li>• Lack of support from medical staff and other health professionals</li> </ul>
Organisational factors	<ul style="list-style-type: none"> <li>• Hospital mission statements advocating holistic care</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of resources/priority allocated to NPT administration</li> </ul>

holistic approach to pain management than using medications alone. One nurse summed this up by saying:

*'... most times, the pain they have is multifaceted, and so an injection of morphine and some relaxation therapy, or some counselling, or some acupuncture to me is appropriate, because you are not dealing with one sort of pain.'*

Some participants also acknowledged that psychosocial issues can exacerbate pain and non-pharmacological therapies offer particular advantages in addressing such issues. For example:

*'I think a lot of pain is manifested by excess stress and when they [patients] talk they get rid of a lot of that, and they relax and they can then choose not to have the narcotic or even Panadeine forte - they just relax, so I think it's worthwhile.'*

### **Beliefs about the benefits of non-pharmacological therapies**

A common theme in nurses' comments regarding their decisions to use non-pharmacological therapies related to the perceived benefits of such therapies with respect to

pain relief. Benefits most commonly endorsed by participants included:

- non-pharmacological therapies offer pain relief whilst 'waiting for' pharmacological agents to work;
- non-pharmacological therapies allow a reduction in the amount of opioid medication required by patients;
- non-pharmacological therapies distract patients during painful procedures;
- non-pharmacological therapies help patients' emotional pain and anxiety; and
- non-pharmacological therapies provide patients with some control over their pain management.

Furthermore, nurses also agreed that these therapies provide other benefits such as the opportunity for enhanced communication between nurses and patients. One nurse shared her experiences:

*'I have found that massage is a very good opening for touching the patient and just letting them know that you have got time for them, and that they have got the opportunity to talk if they like, they can use the massage to relax and get rid of that pain.'*

It was commonly felt that such verbalisation was therapeutic for patients:

*'Yes, and with communication - just the fact that they can express what they want to express can take a lot off their shoulders and make them feel better.'*

Other comments further suggested that these aspects of non-pharmacological therapies were important as they helped contribute to therapeutic nurse-patient relationships. One clear example of this was:

*'Quite often using pharmacological (agents) means giving them a pill, or an injection and that's it. If you stay and apply some of these other therapies, you're giving them time to ventilate and you're nurturing them.'*

Moreover, some nurses believed that non-pharmacological therapies offer patients the opportunity to be more 'in control' of their pain. This was recognised as an important advantage of using non-pharmacological therapies for the following reasons:

*'I suppose it might make the person feel a bit less impotent, a bit less reliant on doctors giving them pain killers, if they think, hey, I can do this, and I can do that, or I can get my husband to massage my back, or I can tilt the bed this way, or whatever it is - it gives them a bit of power.'*

*'I think most people want to know a little bit more about how they can be more in control by choosing some other form themselves.'*

## Enabling factors

Factors which may be considered as enabling within the PRECEDE model include the availability and accessibility of resources, and the skills of the individual themselves. The participants in this study identified issues pertaining to both these types of enabling factors.

### Time and resource allocation

All participant groups expressed concerns about the time needed to implement non-pharmacological therapies. Common themes in participants' comments with respect to this issue included (1) the significant amount of nursing time required to implement non-pharmacological therapies properly, and (2) the implications this had in practice:

*'Sometimes I think - our days are very busy anyway caring for the patients, and then you add on a bit of reflexology and a bit of massage, and it's all time - it's time with the patient, but it's also time away from other things - something has to give to get this done.'*

Participants commented that non-pharmacological therapies were not always discussed with patients if there were more seemingly urgent things to do:

*'Depending on your workload - it's quicker to give a drug than it is to sit for 20 minutes rubbing someone's back, or talking to them.'*

Participants generally felt that non-pharmacological therapies are not considered 'standard practice' and their implementation does not always receive a high priority within the hospital environment. With current economic rationalisations, nurses felt they were already over-extended on a shift, and struggling to meet the many demands placed on them by other nurses, hospital administration and patients, without the burden of including non-pharmacological therapies. One nurse aptly described the problem:

*'Well, the situation is at the moment, that because of the lack of resources, we have a situation in the ward where staff are stretched to the very limits, so therefore, they are having trouble actually providing basic care, which I think is probably standard around a lot of institutions at the moment, so what I was saying is that we would actually like to have the resources to give that (basic care), and then, we would actually like the resources so that we could actually improve upon it.'*

Although nurses were largely supportive of non-pharmacological therapies, their ability to implement such interventions were often counterbalanced by perceived restrictions such as lack of time and resource allocation. Paradoxically, some participants made the point that the implementation of non-pharmacological therapies can lead to less demands from patients and therefore a saving in overall nursing time:

*'It's rewarding nursing because you really feel like you are getting to know the inner person - it's not as time consuming when that happens - if you give a person time and, I believe touch, that touching whether it be massage, or comfort based, it's amazing how much difference that makes in terms of their demands of nursing time - it really cuts that down, so that in the short term, it might be an effort to do that, but in the long term, I think you benefit in terms of not such a demanding shift.'*

Participants in one of the medical/surgical focus group also discussed the perceived benefits of having a resource nurse primarily responsible for implementing non-pharmacological therapies to patients. This idea was well supported in the group as having benefits for patients (through regular access to non-pharmacological therapies), and for the resource nurse (through increased job satisfaction).

### Nurses' skills in administering non-pharmacological therapies

Several nurses identified that the incorporation of non-pharmacological therapies in 'routine' nursing care requires certain levels of knowledge and expertise. It was

recognised that basic forms of non-pharmacological therapies, e.g. the use of hot and cold packs, were already part of nursing practice. However, to include other more specialised therapies such as massage, aromatherapy and imagery, it was suggested that specific training would be required:

*'If nursing staff are going to initiate complementary therapies, our knowledge and expertise is very variable - we're all comfortable with heat packs and touching our patients, and talking with our patients and so on, but we all have a varying degree of expertise and knowledge about other therapies.'*

Whilst it was recognised that education in non-pharmacological therapies was included to some extent in undergraduate nursing courses, many nurses felt that a more uniform approach to non-pharmacological therapy education and training would be necessary before these therapies could be successfully implemented. The importance of skilled administration of these therapies was emphasised:

*'I think it would be fairly important that you didn't have a whole lot of people charging off half cocked in different directions, implementing stuff that they thought was a good idea, but weren't actually skilled at' and, 'I think there is something to be gained by learning to do it properly.'*

Nevertheless, nurses' ability to provide comfort and 'healing' to patients even through simple touch, listening and 'being there', was seen to be as important as the implementation of more technically complex therapies:

*'I don't think you have to be terribly skilled to communicate through touch - you don't have to be a qualified masseuse to be able to rub somebody's feet and back - it's just the contact, the fact that you are doing it, and the fact that you have caring energy.'*

On the face of it, such comments suggest somewhat contradictory views about the nature of non-pharmacological therapies, and the types of knowledge and skills required to implement such therapies effectively. On the one hand, such therapies require specific education to be used effectively, while on the other, they are considered in some circumstances to be an extension of 'basic' nursing care.

### Reinforcing factors

In the PRECEDE model, reinforcing factors refer to attitudes and behaviours of peers, family or other health professionals. In the present study, several important attitudes that are likely to influence nurses' decisions regarding their use of non-pharmacological therapies were identified.

### Patient attitudes

Although nurses felt that non-pharmacological therapies offer patients many benefits in terms of pain relief, distraction, emotional and comfort measures, they also identified that they could not successfully implement the therapies if patients did not believe in their efficacy or value the use of such therapies. For example:

*'You've really got to have a belief in what is happening before you find some sort of result and I think people either have to experience that or believe in that pathway themselves before they get a positive result - it's very hard for you to be effective if you are trying to talk somebody into it.'*

The socialisation of hospitalised patients was believed to be a factor that may deter patients from accepting non-pharmacological therapies. One nurse summed this up:

*'Coming into an acute care setting means they will receive pharmacological agents... in acute care settings the patients are socialised into expecting to receive pharmacological agents, they are not socialised into the opposite.'*

Another nurse stated that:

*'Some people certainly aren't wanting anything else (other than medication) - that's the way that's acceptable to them - the only solution that's acceptable to them, and they won't accept anything else you give them.'*

Nurses suggested that although some patients were receptive to non-pharmacological therapies, acceptance from patients for their use *in a hospital setting* was essential to successful implementation of such therapies.

### Health care professional attitudes

Support from nursing peers, medical officers and hospital administration was identified as affecting nurses' ability to administer non-pharmacological therapies. Several nurses commented that their fellow nursing colleagues often had mixed opinions about non-pharmacological therapies. Whilst some organisational support for their inclusion in patients' pain management was acknowledged, participants strongly felt that significant nursing, medical staff and hospital management did not place priority on the administration of such therapies. Some nurses felt a lack of confidence in themselves and their peers to independently incorporate the therapies in their nursing practice fearing reactions of their colleagues (including doctors):

*'There is a fear - fear of how we will be accepted by colleagues if we are behind the curtain doing this weird stuff.'*

If it was also perceived that, if non-pharmacological therapies are not accepted by others (eg nurses, doctors and hospital administration), it would be difficult for

nurses to validate the time and resources spent administering the therapies:

*'There are those that would say why are you bothering with that, get on with the real work - and that attitude is still very strong.'*

Some nurses felt that increased knowledge and exposure to non-pharmacological therapies would result in greater acceptance for the inclusion of non-pharmacological pain management in nursing practice:

*'We have to educate everyone regarding non-pharmacological pain management and the benefits that it will bring.'*

Some reference was also made to the need for a greater evidence base to support non-pharmacological pain management before medical staff and hospital administration would accept these therapies:

*'The acceptance basically comes from getting research - facts and figures of what we are talking about' '... to be able to have something scientific [showing] that there are benefits would be great.'*

It was interesting to note, however, that in some circumstances, some nurses were content to implement non-pharmacological therapies if they believed patients benefited, even without having this scientific evidence supporting the usage of non-pharmacological pain management. For example:

*'It's nice to have those things to back you up, but if you don't have the statistics to back you up, it's not going to stop you from putting a hot pack on someone.'*

### **Organisational factors**

Overall nurses found it difficult to justify using their time implementing therapies that are not perceived as a high priority by other nursing colleagues, or hospital and nursing management:

*'It's a conflict sometimes, you feel that you would like to do more of that sort of thing, but you feel you should go on with all the practical, technical stuff that has to be done as well.'*

Nurses also expressed the belief that implementing non-pharmacological therapies not only offered benefits to patients, it also helped authenticate hospital philosophy and achieve the goals of hospital mission statements:

*'Actually, it's not only the staff and the patients that benefit from it - I mean the staff get something back, the patients, certainly, I think, respond better to it, but it also says something about the hospital, I think if you are prepared to go that little bit further ... it will make a difference in terms of promoting the hospital and the type of nursing care, and the staff here, and as has been said, it*

*helps start to achieve that mission statement and puts some truth back into it.'*

## **DISCUSSION**

The purpose of the present study was to explore, through focus group interviews, factors that may influence nurses' decisions to use non-pharmacological therapies. The main issues that emerged from the focus group discussions were the perceived benefits associated with using the therapies, the lack of time to implement these therapies, and a degree of ambivalence regarding the acceptance of such therapies by patients, medical staff, other nursing staff and hospital administration.

The opportunity that non-pharmacological therapies may offer in areas such as improved communication between patients and nurses are clearly important issues for further investigation. Participants in this study generally believed that implementing non-pharmacological therapies would provide nurses with a unique opportunity to further develop their therapeutic relationship with patients. This would facilitate patients' verbalisation of concerns and allow nurses to address psychosocial issues, which may be influencing the patient's pain.

Nurses also believed that patients gained a heightened sense of reassurance that nurses were concerned about their welfare and available when needed. These notions are consistent with research findings that have shown that non-pharmacological therapies are associated with psychosocial benefits such as decreased anxiety, tension, increased sense of control, and physical benefits such as decreased pain (Arathuzik 1994; Beck 1991; Strong et al 1989). Focus group participants stated that after receiving non-pharmacological pain relief, they believed that patients placed less demands on their (nurses') time, that patients achieved a greater sense of control, were more relaxed and settled, and were more able to participate in activities of daily living (such as mobilisation and sleeping).

Despite the perceived benefits of non-pharmacological therapies, several barriers were also identified which may be hindering the effective use of non-pharmacological therapies. Of particular note is that there are several apparent contradictions surrounding the implementation of non-pharmacological therapies in daily practice. For example, of primary concern is that the value placed on non-pharmacological therapies in managing patients' pain in today's health care setting is not high. Although nurses identified several important benefits of non-pharmacological therapies associated with improved pain management, improved patient satisfaction, feelings of self control, enhanced nurse/patient relationships and ability to fulfil hospital goals and mission statements, they also acknowledged that implementing non-

pharmacological therapies was not always a priority. The primary reason for this was a perceived lack of time to implement non-pharmacological therapies due to organisational pressures to complete more 'traditional nursing tasks'. A degree of perplexity was expressed by nurses relating to hospital mission statements that advocate a holistic approach to practice with emphasis on excellence in care, yet do not provide nurses with the necessary time and resources to implement 'excellent care'.

Nurses also felt uncertain about the degree of acceptance of non-pharmacological therapies by patients, nurses, and doctors and the significance of this acceptance. Whilst it was acknowledged that patients would have to agree to use non-pharmacological therapies before they received them, different opinions existed about the degree of support and acceptance toward non-pharmacological pain management offered by nursing and medical peers. What was agreed, however, was that for the administration of non-pharmacological therapies to be successful, negative opinions expressed to patients (either from nurses or doctors) would have to be minimised. Participants identified that lack of support for non-pharmacological therapies from other nurses and doctors could potentially prevent patients from agreeing to the implementation of non-pharmacological therapies, and could also prevent nurses from administering these therapies through fear of recrimination and ridicule. It would seem that the reality of daily practice is that non-pharmacological therapies don't receive the priority they deserve because they are not recognised as 'standard' care, and thus lack support from nursing and medical colleagues. Some also emphasised the lack of scientific evidence that is essential to gaining this support. Such contradictions and tensions exemplify the difficulties surrounding the routine implementation of non-pharmacological therapies in the contemporary health care context.

The constraints associated with the effective use of non-pharmacological therapies that have been identified in the present study are consistent with other writings in this area. That is, non pharmacological therapies are typically seen as being underutilised due to: time constraints placed on the delivery of care (Ferrell et al 1991); nurses' beliefs that non-pharmacological therapies are too 'simple' to use in a hospital setting (Kelvinson and Payne 1993); nurses' lack of knowledge or skills in implementing non-pharmacological therapies (Edgar and Smith-Hanrahan 1992); the lack of scientific evidence supporting non-pharmacological therapy usage (Mayer 1985); the fear of recrimination from peers, a willingness to conform to ideals and practice within the 'medical model', and a reluctance to practice without specific orders (Astberger 1995; Rankin-Box 1995; Snyder 1992). Despite this there is some evidence to suggest that there is an increasing interest in the use of non-pharmacological therapies.

## Limitations

Participation in the focus groups was voluntary, and as such it was expected that only those nurses interested or experienced in non-pharmacological therapies would participate. This does present some limitations with respect to generalisation of results, and also may mean that some usage issues would not be identified. However, this study was designed as a preliminary study to obtain information for questionnaire development that would further explore the pertinent issues with a broader sample including nurses not necessarily experienced or interested in non-pharmacological therapies. Therefore, some experience or interest in non-pharmacological therapies was beneficial.

## CONCLUSION

Overall nurses in this study felt that although administration of non-pharmacological therapies was sometimes difficult with significant obstacles, benefits not only to patients but also to the organisation makes the pursuit of this activity worthwhile. During the discussions, nurses identified that non-pharmacological therapies are useful to implement in conjunction with pharmacological treatments, particularly to ease patients' pain while waiting for pharmacological analgesics to work; and, between doses of pharmacological analgesics. The benefits non-pharmacological therapies offer with respect to communication and allowing patients to verbalise any anxieties were also identified as useful in addressing the multidimensional nature of pain. Furthermore, nurses also felt that non-pharmacological therapies gave patients the means to feel more in control.

Despite these benefits, it was clear that the use of non-pharmacological therapies was not part of standard nursing practice. Perhaps one of the main reasons non-pharmacological therapies are not part of routine nursing practice is a lack of understanding and disagreement about the role that these therapies play in improving patients' pain management.

Throughout these focus group interviews numerous contradictions were reported. For example, on the one hand, non-pharmacological therapies were seen to require specific knowledge and skill, while on the other hand they were seen to be simply an extension of basic nursing care. It was apparent during the interviews that nurses tended to view non-pharmacological therapies generically, and were not perhaps as well informed about subtle differences between different therapies, or of how particular non-pharmacological therapies worked in particular situations.

These issues associated with the use of non-pharmacological therapies suggest there is an urgent need for further conceptual clarification of the nature and scope of specific types of non-pharmacological therapies as an

important starting point. For example, a taxonomy of non-pharmacological therapies, or clinical guidelines with more clearly defined evidence based information regarding the particular uses and benefits of specific therapies, may be of great assistance in clarifying the scope for such therapies. The development of such tools will require, however, a great deal more research into the efficacy of particular therapies in specific clinical situations.

Similarly, a further contradiction evident in this study is that while the holistic approach was an acknowledged feature of non-pharmacological therapies, and recognised as offering enormous benefits to patients, support at the organisational level, and from peers and other health professionals was not perceived to be forthcoming. These results highlight the significance of organisational and cultural factors in nurses' decision making, and indicate that adequate attention will also need to be given to addressing the many barriers that hinder the use of these therapies in a hospital setting.

It is important to note here, however, that one of the most promising findings from these focus group interviews is that nurses appear to have a keen interest in the adjunct use of non-pharmacological therapies to manage patients' pain. Such interest represents an excellent base on which to further develop the role of non-pharmacological pain management.

Nevertheless, the views expressed by nurses in this study indicate that, as well as address knowledge and information deficits of individual practitioners regarding non-pharmacological therapies, educational initiatives thus need to be targeted to address the cultural beliefs and attitudes within an organisation or unit which determine the value that is placed on non-pharmacological therapies. Furthermore, the results of this study suggest that support from nursing administration through allocation of time with patient acuity systems, and acceptance and/or support from medical officers for certain therapies to be implemented, may go some way to improving the use of non-pharmacological therapies by nurses. In the current climate of cost constraint, this is only likely to occur if nurses can clearly demonstrate through rigorous patient outcome studies, that benefits actually derive from the use of these therapies.

## RECOMMENDATIONS

The authors intend to extend these research findings through the use of quantitative studies. It is anticipated that these studies will help support and clarify the findings from this pilot study. However, the usage and acceptance of non-pharmacological therapies would be enhanced further by research investigating:

- The efficacy of particular therapies in specific clinical settings;

- The impact of non-pharmacological therapy usage on patient acuity with respect to health care costs; and,
- The role of non-pharmacological therapies in nursing practice with respect to nurse/patient relationships, nursing autonomy and job satisfaction.

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# CONTINUED NEGLECT OF RURAL AND REMOTE NURSING IN AUSTRALIA: THE LINK WITH POOR HEALTH OUTCOMES

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## ABSTRACT

Difficulties facing Australian rural and remote nurses first emerged decades ago and recent Australian Federal Government rural health strategies have promised improvements in health outcomes. However closer scrutiny of the funding allocation supporting these claims reveals that although nurses provide the majority of health care, they receive only a small fraction of funding support. Successive rural health strategies have continued to overlook nurses' concerns regarding the nurse - practice environment interface. This persistent lack of political support stifles organisational support for the nursing role, resulting in frustration, resignation and diminished health care delivery. Meanwhile, rural and remote population health outcomes fail to show signs of improvement.

## INTRODUCTION

The Australian rural environment is one of low population densities, poorer population health statistics and therefore, more likely to have concomitant increased and more complex health care needs (Australian Institute of Health and Welfare [AIHW] 1998a). This is coupled with substantially fewer medical practitioners (Hays et al 1998). Traditionally nurses have been meeting the health care needs in rural and remote areas in whatever manner they can with whatever resources are available (Hegney et al 1997). The complexity of attending the range of health care needs in extreme environments therefore presents specific challenges to nurses' practice (Willis 1991).

The breadth of literature spanning several decades describing difficult practice environments experienced by rural and remote nurses suggests their problems have largely been ignored (Colditz and Elliott 1978, Ormiston 1983, Klotz 1984, Cramer 1995, New South Wales Department of Health [NSW DoH] 1995, Hanna 2001). Meanwhile, Federal Government rural health strategies have concentrated on doctor ratios and systematically undervalued the role of the nurse and overlooked nurses' concerns (Australian Health Ministers' Conference [AHMC] 1994, AHMC 1996, Wooldridge 1999, Wooldridge 2000). This paper explores the impact of ignoring the significance of the nursing contribution and challenges the wisdom of this medico-centric focus to health service provision.

This paper suggests that there is a link between the lack of positive Federal Government responses to the much-published nurses' workplace difficulties and the persistent poor health outcomes of rural and remote communities. The study was conducted in order to determine whether problems reported elsewhere still persist, and to provide primary source examples of the difficulties confronting nurses. Benchmarking these working environments, as described by participants, against the current focus on *quality health care, accreditation* and *best practice*, serves to highlight the magnitude of the gulf between the

standards of health care available to metropolitan versus rural or remote communities. It also highlights discrepancies between the political rhetoric and reality.

The study described here investigated health service delivery in three diverse settings. Factors that acted as barriers to effective nursing practice were identified. Evidence presented here suggests that previously identified barriers persist across rural and remote Australia. Nurses argue these barriers significantly reduce their capacity to provide adequate levels of health care, and in so doing, create a level of frustration which forces remote area nurses to resign their posts. This further limits efficacy, as service provision is interrupted. As nurses provide most of the primary care in these areas, external impediments to effective practice therefore diminish the ability of rural and remote communities to access appropriate health care. The World Health Organisation (WHO) defined access to health care as:

*Accessibility implies the continuing and organised supply of care that is geographically, financially, culturally, and functionally within easy reach of the whole community. The care has to be appropriate and adequate in content and in amount to satisfy the needs of people and it has to be provided by methods acceptable to them* (WHO 1978, p.58).

Rural and remote nurses have repeatedly identified shortcomings in the Australian health care system, where barriers to practice reduce the quality of health care to below acceptable standards (Commonwealth Department of Health and Aged Care [DHAC] 2000). By constantly ignoring these messages, past and present Federal Government strategies profoundly diminish accessibility of rural and remote populations to effective health care. This strict adherence to the current medico-centric rural health policies helps to explain the poor outcomes observed in rural and remote health status.

Whereas the distinctions between rural nursing and remote nursing practice are substantial in many facets, it serves no useful purpose to differentiate for the purposes of this paper. What is relevant is here is nurses' invisibility to Federal and State Governments, and administrative bodies. The outcome of this invisibility is inadequate health care provision to populations most dependent upon nursing care.

## LITERATURE REVIEW

Rural and remote area nurses report extreme levels of occupational stress stemming from a lack of organisational support (Willis 1991). Journals have published nurses' concerns regarding their practice environment since the 1970's (Colditz and Elliott 1978). Information regarding the constrained working environments confronting nurses has therefore been in the public domain for many years.

The most notable feature amongst these papers is the consistency in theme of constraints to effective practice (NSW DoH 1998).

The significant disadvantages of rural practice have been identified as: (i) restricted opportunities for continuing education; (ii) difficulty obtaining adequate locum assistance for leave; and, (iii) professional isolation (NSW DoH 1998).

Other frequently documented issues include:

- inadequate resources - equipment and facilities;
- staff shortages;
- lack of relief staff;
- absent or inadequate orientation, specifically cultural orientation;
- stress resulting from the broad range and complexity of skills required for the position, often in the absence of medical support, and compounded by limited opportunities for further education and training; and,
- lack of personal security.

(Ormiston 1983, Klotz 1984, Dawson 1992, Cramer 1995, Tattam 1995, DHAC 2000)

More than 20 years have passed since these issues were first published, yet these identical issues continue to permeate the literature, suggestive that little has changed, and despair and frustration are rife (Huntley 1995, Kennerson and Chiarella 1996, Hoadley 1998, NSW DoH 1998, Spencer et al 1998). The logical consequence of this situation is low morale and resignation. Accordingly, nursing staff retention has now evolved as a problem of such proportion that in 1995 the NSW State Government commissioned a task force to investigate the reasons. Also in NSW, a *Rural and Remote Nursing Summit* was convened to explore these issues and develop a series of strategies to address problems (NSW DoH 1998).

The Federal Government funded *National Rural Health Strategy*, developed in 1994 and updated in 1996, was designed to address the problems of poor health in rural populations. These were followed by *Healthy Horizons 1999-2003*, released in 1999. These documents promised to address rural workforce issues. Although the terminology in the strategy outlining targeted workforce groups remained vague, they were initially greeted with optimism from nurses anticipating their needs would be also addressed. However the optimism was misplaced as subsequent rural health budgets continued largely to ignore nurses (Anderson 1997, DHFS 1996, DHAC 1999a, Wooldridge 1999, Wooldridge 2000). This issue is therefore of significant concern to nurses, nursing practice, and more importantly, to the health of the Australian population.

## METHODOLOGY

The specific aim of the study was to explore the efficacy of the provider - practice environment interface in rural and remote Australia. A tri-polar case study design methodology was applied to gather detailed situational information from the providers' perspective. In-depth semi-structured interviews were conducted with four senior nurses. Two were practicing as remote sole practitioners, and two practiced in a rural setting. Sampling was purposive. The study was limited to three settings as it was viewed that sufficient data had been generated to determine that, despite decades of nurses' demands for change, significant barriers to effective practice continue to exist. The intent was to explore the issue as a pilot study. In the event of finding persistent and substantial workplace problems, this pilot was to serve as a basis to support a funding proposal for a significantly larger study across all states.

As the study was limited to three settings, maximal diversity was sought. Practice environments were selected to include one Aboriginal remote, one non-Aboriginal remote and a mixed rural community. Rationale for this was to exclude the possibility that workplace issues were simply a function of one particular setting. Locations suiting these criteria were found in three states, Northern Territory, South Australia and Victoria. This strategy sought to also maximize diversity in funding mechanisms and organisational structures. One health agency received funding from the Aboriginal Medical Service, one from a church group and one clinic was dependant upon State Government funding.

All participants accepted the invitation to be interviewed, and were keen to participate in any process which might help policy makers acknowledge and rectify the situation facing them, their peers, and the communities in their care.

Cross-case analysis of the findings using grounded theory was performed to identify common themes and compare practice related features emerging across the three diverse settings. Interviewees were asked to elaborate on specific examples of negative impact on patient care only after they had nominated this as an issue. Limited information of this aspect was available from the published literature. Interviews continued until the interviewees believed they had imparted sufficient information to enable full comprehension of their practice environment.

### Case study 1 - Northern Territory

This case study examined the health service in a remote community of 250 people, mostly Aboriginal, comprising three different 'skin' groups, living on the edge of a desert,

500 km by bitumen road from Alice Springs, or 250 km by 4-wheel drive track. The sole registered nurse (RN) was assisted by two Aboriginal health workers who job shared. Royal Flying Doctor Service (RFDS) retrieval could take up to five hours to get there.

### Case study 2 - South Australia

The second remote clinic examined was located in a railway siding township on the Nullarbor Plain, with a population of 150 non-indigenous railway maintenance workers and their families. This township was extremely isolated, being only 100km from Maralinga, the British nuclear testing site of the 1950s. Travel time to reach Port Augusta or Kalgoorlie by train exceeded 12 hours, and the nearest highway was two to five hours away, depending on weather and condition of the road. The RFDS could arrive from Alice Springs in three-and-a-half hours, when an aircraft was available. The town and health clinic also serviced the travelling train population, many of whom were elderly with complex medical conditions, unwilling or too unwell to fly across the continent.

The clinic in this setting had six beds and one cot and was staffed by one RN. No access to a general practitioner (GP) was available, however telephone medical advice could be sought via the RFDS. Some restricted specialist services were supplied on a rotational visiting basis. The community was facing imminent closure of the church funded clinic.

### Case study 3 - Victoria

The third community setting explored in this study was a northern Victorian town, near the Murray River. The population, currently almost 1000 people, is gradually declining and ageing, but swells significantly with young families during holiday periods. The state funded health care services provided are located in a small rural hospital comprising 10 acute beds and 12 nursing home type beds, serviced by a nursing staff and two GPs.

Compared to the remote area nurse clinics, staff turnover at this agency was very low, reflecting national and international trends in rural settings (Muus et al 1993, Huntley 1995). No pharmacy services existed within the facility or township. No facilities for air evacuations were available. Waiting times for a road ambulance to arrive often exceeded three hours, despite being only 50km from a Level B referral centre. Two senior RNs were interviewed from this setting.

### Barriers to effective practice

Cross case analysis of working environment issues revealed consistent themes which kept re-emerging as inter-related issues across these three diverse settings.

*MAJOR ISSUES FOR NURSES*

- Lack of resources, inadequate equipment and facilities;
- Overwhelming sense of lack of organisational support for the position;
- Limited or absent preparation or cultural orientation;
- Diverse range of skills required - professional and some unrelated;
- Infrequent demand on specific clinical skills - maintenance of skills;
- Limited medical support, nil allied health support;
- Inability to access education and educational resources;
- Pressure to extended practice scope, varied support to do so, legal implications;
- Unmet debriefing needs and confidentiality issues;
- Lack of administrative recognition of importance/respect for role which reduced capacity for nurse(s) to authorize or implement changes;
- Insufficient relief and respite available;
- High profile position within the community - effectively 'on call' every day;
- Personal safety.

*OTHER ISSUES*

- Professional isolation - reduction of transference of new ideas/practice methods;
- Isolation - delay in response times - supplies, evacuations;
- Feelings of responsibility to community they serve;
- Personal and community-wide sense of abandonment.

***Lack of resources***

In **case study 1**, no orientation was provided and the nurse could find no resource material covering policies or protocols on arrival to her first remote placement. Also absent were procedure manuals, contact details and information regarding referral mechanisms and the process to organise RFDS evacuations. No reference texts were available, and the level of equipment and supplies was deemed to be inadequate. Supply orders were often delayed, expired or the wrong items were delivered. Cold chain facilities were severely flawed.

Patient care was further compromised by other difficulties described as 'numerous, varied and frustrating', such as the physical inability of the nurse to open the damaged rear doors of the four-wheel drive ambulance. Patient transport involving hundreds of kilometres over four-wheel drive tracks, sometimes in the dark, was the nurse's responsibility. This became an onerous task when compounded by such problems as being physically unable to get patients in or out of the vehicle.

In **case study 2**, the supply of essential resources and equipment was limited not only by the size of the clinic,

but also by the nature of the funding. Additional difficulties arose from the location of the funding agency. Cramer (1992) found that when management was based at distant locations, such as Sydney, the stark contrast in culture and distance contributed to low levels of comprehension and interest in the stress resulting from delays or inappropriate resourcing. Few of the Sydney-based management personnel involved in arranging funds or supplies had ever visited the study site. The situation had improved little from the nurse's first appointment at the clinic in the 1970s, a mere 12 months post qualification, when orientation was not provided, nor were procedural manuals available. Such conditions at this remote location persisted for at least 25 years. However, by the latest tour of duty in 1998, telephones were available as were Council of Remote Area Nurses of Australia (CRANA) publications.

In **case study 3**, chronic staff shortages meant prioritisation of care provision, and necessitated functioning on a minimalist approach. Nurses reported internal conflict resulting from external restrictions limiting the care they were able to provide. Chronic understaffing of this health care facility necessitated a reorientation of health care priorities whereby health promotion and health education were perceived as 'luxurious extras' and therefore not routinely offered. Consequently, patients were discharged with little information or advice about how to manage their condition, or how best to prevent or minimize further episodes.

Constant stress arose from the mismatch in resources versus community health needs. Absence of a pharmacy within the town created tensions as nurses were unable to dispense medications. A lack of clarity about their role in the supply of medications, and the absence of appropriate standing orders created illogical and potentially harmful outcomes in such instances as supplying asthma medications to a passing ambulance in short supply, or critical drugs (eg Dilantin) to holidaymakers to provide cover until they could attend a pharmacy in another town.

***Lack of organisational support***

The most significant and most alarming finding of the study was the consistency and the depth of frustration and disillusionment stemming primarily from a lack of organisational support for the role of the nurse as health care provider. This problem is widespread (NSW DoH 1998), and surfaced in a wide range of examples of unmet needs across all settings in the study. Lack of recognition of the fundamental operational needs of the role of primary health care provider was the factor ultimately responsible for the decision to resign by remote area nurses at both sites.

In despair, suffering frustration, mental and physical exhaustion, the nurses reluctantly departed in full recognition of the detrimental impact this would have on their communities. Justifying their decision to their communities, their patients, was reportedly extremely difficult.

Meeting professional needs was viewed by all participants as essential for the provision of adequate health care to occur. The absence of appropriate support, characterised by lack of response to repeated requests and demands for resources, rendered their performance less than their own professional tolerance and standards would allow. One nurse claimed:

*I couldn't continue and be a party to this any longer. I was tired of banging my head against a brick wall when nobody cared what happens to these people. I couldn't do it all myself. It was as though I was fighting the system as well as all the community's health problems associated with living out here.*

At no stage was lack of organisational support viewed to be related to the personal attributes of the nurse. All those interviewed reported that the situation was still endemic among their peers at other locations. This supports the findings of the NSW Recruitment and Retention Taskforce Report and other studies (Cramer 1992, NSW DoH 1995, Wolfenden et al 1996).

### **Cultural preparation**

No cross-cultural preparation was provided prior to appointment to the Aboriginal community, so dealing with cultural issues was initially based on intuition and guesswork. The nurse considered this significantly extended the time required to develop a trusting, and therefore effective, provider relationship with community members. The health professional needs to become familiar with Aboriginal culture and the specific needs of their local Aboriginal group. Until this occurs, providers remain locked within their 'western' frame of reference, their understanding of indigenous behaviour is flawed, as cues are misinterpreted and communication is non-effective (Wakerman and Field 1998, Baum 1999). Hence the provider is often unable to enter real dialogue, accurately identify problems, predict likely responses and plan care accordingly (Willis 1991).

The nurse soon identified that clinic attendance rates were directly proportional to the level of trust in the clinic personnel. High levels of suspicion were observed initially as historically, new nurses were not expected to remain in the community for more than a few months. Turnover in remote areas can reach 400% and higher (Kreger 1991, Carruthers 1996).

The Aboriginal community demonstrated a strong resistance to being instructed to attend appointments,

follow treatment recommendations or adopt suggested lifestyle modifications. Provider ignorance of this cultural trait was initially reflected in low compliance and professional efficacy was severely reduced as the nurse's offers of service provision were refused. Over time, the flaw of taking a seemingly 'instructional' approach was realised. The nurse described her interpretation of their reluctance to comply in terms of a community almost totally dependent on welfare, which severely limited their ability to make personal life choices, and resulted in a widespread fatigue at following what is seen as 'more instructions from the white system':

*In effect, the only form of choice these people can exercise when dealing with 'the system' is a decision not to attend clinic ... Over time, I changed my approach. A sense of trust was developed. Attendance rose, and some of my recommendations were adopted ... but I couldn't do much in the first few months. I felt useless. I was so frustrated, because they had so many health problems, and I couldn't help. It eventually got better in time - but it took a while.*

The negative impact of high staff turnover rates can be profound and continuing, as health services and programs are interrupted while each new clinician not only arrives, but gradually gains understanding and acceptance into their new community. Communities experiencing high turnover in health workforce are spending extended periods without access to effective health care, which can persist for several months beyond the arrival of new health professional(s). In some cases, given the absence of cultural preparation, the nurse may leave before ever becoming truly effective. Meanwhile, a community fatigue develops as new faces come, struggle and leave. In this context, it can easily be seen how the process by which new practitioners earn acceptance within the community increases in complexity.

The recurring pattern is one of evaluation of each new arrival, hopefully eventual acceptance, yet the inevitable departure leads to subsequent disillusionment and growing suspicion demonstrated to the next incumbent. The chronically high rate of staff turnover in these regions is therefore a critical issue with significant impacts on population health, and must be addressed promptly (McDermott 1998).

Neither of the remote nurses were provided with preparation for life or work in remote Australia. Both RNs described their early months as being in a state of 'shell-shock'.

### **Variability in caseload**

Another striking feature across these three diverse workplace settings was the extensive range of skills

required by these rural and remote nurses. In the absence, or shortage of medical and allied health personnel, possession of excellent clinical nursing skills is an absolute necessity to avoid extremely poor outcomes. Nurses with advanced emergency care skills maximize patient outcomes and can prevent death (Foster et al 1994). In rural and remote Australia many high acuity skills are called on, however these skills are required infrequently (Hegney et al 1997, NSW DoH 1998). This places limitations on both the development and maintenance of expertise, and accordingly, confidence to perform them. Where nurses no longer feel competent to use these skills, communities depending on those skills are disadvantaged.

Prior to first taking up her post, one remote area nurse sought three days suturing experience and also sought instruction on the techniques of performing tooth extractions and temporary dental fillings. These activities were self initiated and, where necessary, self-funded, yet the skills were frequently required.

However, despite long professional careers, excellent and broad ranging clinical skills, all interviewees reported encountering many situations which stretched their clinical repertoire. These instances were not infrequent as long delays in air or road evacuation were common, necessitating extended stabilization, maintenance and monitoring of patients. Receiving telephone instructions from the RFDS describing the technique to intubate a patient suffering severe head and neck burns was one vivid example recalled. The patient survived.

Functioning as a lone practitioner in the remote areas exacerbates these issues. Remote area nurses within the study argued their work largely involved crisis resolution with insufficient residual time to provide health education, health promotion or adequate counselling. This confirms the findings of Bell et al (1997), Sealy (1997) and Stratton et al (1995). Denial of these public health activities further disadvantages remote populations with known high levels of need in these areas.

Surgery was not performed at the rural hospital, and less than 15 births are delivered on site per annum. The small hospital carries no funded accident or emergency facilities, yet tourists not realising this, frequently seek access to services, particularly during the busy tourist season on the river. Some are urgent cases. Complex road trauma cases also present, whereby victims and their families expect the nurses to provide appropriate emergency care. While awaiting the ambulance, which can involve a delay of three hours, emergency care and stabilisation of the patient is required. The inability or failure of doctors to attend urgent cases when paged is a common stressor identified by nurses in rural areas as nurses provide what treatment they feel clinically competent, and are sanctioned to provide (Healy and

McKay 2000). Cases arise where pressure to extend their scope of practice is driven internally by a desire to assist, and externally by the relatives, friends or patient. This desire to help in a framework of legislated restrictions or hospital policy, presents a profound source of stress for rural nurses.

The range of skills generally required therefore was diverse, reinforcing the specialist-generalist nature of the rural nurse role, and the consequent imperative for clinical updates (Hegney 1996, Jones and Cooke 1996). However, the rubbery and unpredictable nature of medical and administrative expectations for nurses to extend their scope of practice, was a major issue identified at this site. Extensions of practice were not endorsed by administration. Yet doctors requested advanced practice on some occasions, while at other times, it was rejected and drew public criticism.

Lack of professional support for nurses to sustain or upgrade their skills leads to an erosion of self-confidence in their clinical ability to provide that level of complexity if required. This feature is also commonly reported elsewhere (Hegney et al 1997, Shi and Samuels 1997, NSW DoH 1998).

### ***Access to educational needs***

Realising their limitations, nurses at all study sites repeatedly called for access to educational opportunities. Geographical isolation without locum relief restricts attendance at seminars, workshops and even informal discussions with colleagues (Hill and Alexander 1996, Bell et al 1997, NSW DoH 1998). No educational opportunities were available at the time at any of the three locations. Operating as lone practitioners, the remote nurses were unable to leave the community to attend further training, or be granted formal study time, as no one else was available. Where calls for additional training are systematically refused, it can only be presumed that the first few cases encountered must be disadvantaged as practitioners learn by experience. The implication here, in the worst case scenario, is that experience is gained at the expense of the patient, where learning occurs in instances of omission or error. Whereas this unfortunate scenario may be unavoidable in some instances, it serves to highlight the potentially devastating effect of high staff turnover rates.

The small size of the rural hospital was a limiting factor in the ability of the nursing complement to adequately cover workplace industrial requirements of sick leave and holidays. Granting study leave therefore becomes a low administrative priority (Hegney et al 1997). The impact of such a policy is a reduction in applications for leave, as refusal is expected. Hospitals of this size are severely limited in their ability to attract skilled staff and maintain skills currency of specialised staff, such as midwives

necessary to attend the low numbers of births. Low turnover of staff may lead to a stagnation of knowledge, and persistence of outdated treatment modalities such as the much publicised kerosene bath incident demonstrated at a Melbourne nursing home (The Age 2000).

In the interests of providing quality, or at best *adequate* care, the rural nurses also argued that granting access to ongoing education and funding staff relief were paramount in small organisations. Nurses at this site expressed despair that current funding models, and hospital administrators, did not recognise maintenance of specific nursing skills as a valid need. They stressed patient care and the community's health was being compromised as a result.

### ***Isolation, relief and respite***

For the remote area nurses, the sense of social isolation experienced was extreme. Vast distances limited opportunities to leave the town for social contact elsewhere. Confidentiality and the sensitive nature of many issues meant that debriefing needs could not be met locally. High visibility in small communities meant they were effectively on call 24 hours a day, every day. Professional isolation was also extreme and listed as a major stressor. Travel to establish links with peers was costly in terms of time and money. However, immense gratitude was expressed for the support and empathy provided by the RFDS staff who recognised the difficulties of the remote practice environment. Both remote nurses raised the lack of support in this regard from their administering bodies.

No orientation or preparation for dealing with issues associated with living in the outback was offered at either of the remote locations. Also not available was access to professional support services, counselling or assistance with coping with personal issues arising from isolation. The nurses described their feelings with intensity of being 'emotionally traumatized by their experiences'. The nurses frequently sought this support from friends 'from home', outlining their frustrations via long distance telephone calls, and received variable tangible benefit from those who could not fully imagine their situation.

Despite being a provision of remote area employment contracts, adequate relief or respite was routinely denied, even for circumstances identified as constituting an occasion of great need, again due to the perpetual shortage of available relief nurses. Professional isolation and absence of opportunities to access education or skills updates were exacerbated by the inability to secure locum relief. The angst associated with an inability to leave was compounded by a high sense of commitment, as sole health provider, to the community. Both remote nurses eventually resigned following extended periods of rising stress levels, inability to sleep and a sense of entrapment.

On return home, one remote RN was diagnosed as being in a 'state of complete physical and mental exhaustion'.

### ***Personal safety***

An extreme example of lack of organisational support was demonstrated in the issue of personal safety. For many years Federal and State Governments have been aware that exposure to violence is a problem for remote area nurses. An Australian Nursing Federation study found that 85.8% of remote area nurses have experienced violence (Fisher et al 1996). Employers have a responsibility to provide a safe and secure environment for their employees. This is not only a significant ethical issue, but also now a legislated one. Fisher et al lamented this was not happening in a systematic way in 1996, and systems ensuring personal safety continue to remain arbitrary to this day.

The nurse in **case study 1** reported that during one Christmas period movement among groups within the community was high. Alcohol consumption increased and, during a span of several days' conflict between the different groups escalated. A riot situation eventually arose raising real fears for the personal safety of the solo nurse. The nurse's accommodation was central to the district of greatest violence. The alarm system in her home had been damaged by a previous burglary and despite repeated requests, had not yet been repaired. The only contact for assistance, should the need arise, was via telephone to the council, however this option was not available as that telephone had been disconnected to avoid nuisance calls, effectively isolating the nurse in the midst of a riot situation. This action demonstrated a disregard for the safety of the nurse, and was particularly distressing in light of a recent attempt on a nurses' life in a nearby community during a similar outburst:

*This became the final straw - I resigned.*

## **DISCUSSION**

### **Federal Government response**

Nurses have researched and published their concerns, similar to those described here, for decades. The organisational barriers to effective health care delivery described are not new. Yet the Federal Government focus *in real terms*, that is via funded strategies, remains medico-centric.

Proposal 8 of *The National Rural Health Strategy 1996 Update* describes strategies to address rural health issues (AHMC 1996). Yet the funding accompanying this rhetoric is meagre for nurses as their concerns have consistently been ignored.

Nurses presently provide 90% of the health care in remote areas, and form 87% of the rural health care workforce (AIHW 1998a), yet annually received less than 1% of rural health workforce support funding. However doctors comprise only 7% of this workforce and receive directly over 49% of the funded support (AIHW 1998b, AIHW 1999, DHAC 1999a, DHAC 1999b). Medical incentive strategies have existed in various forms since introduction of the General Practice Rural Incentive Program in 1992 (Norrington 1997), yet these millions of dollars have not achieved a reversal in medical shortfall in rural areas (AIHW 1998b, AIHW 1999).

While this bias persists, little will change, and the health of rural people will continue to suffer. Unless government policies are altered dramatically, we can expect no real improvement in rural health status. The answer to rural health problems is not simply a matter of addressing doctor shortfalls.

### The task ahead - for agencies and governments

The poor health status of rural and remote Australians constitutes a significant problem, and no 'quick fix' exists. However it must be recognised that current Federal Government strategy approaches are clearly not working. The National Nursing Workforce Forum (2000) identified that professional barriers often impede optimum patient care, as examples described here provide sad testimony. Policy makers need to acknowledge the value and efforts of the existing health workforce. The most pressing task for the Federal Government, is to recognise the plight of those who are presently struggling against a disturbing plethora of organisational impediments, to bring improvements to the health of our rural and remote communities. High on the political agenda should be funding programs aimed at addressing the needs of nurses, to ensure access to education (initial orientation and training followed by regular updates), to provide adequate resources, clinical mentoring and locum relief.

Remote nurses continue to be employed as sole practitioners. The advantages of dual staffing as an absolute minimum should be recognised. Appointment of a second provider would facilitate staff development education and training leave. Having at least two providers creates opportunities for diffusion of difficult problems, and facilitates mutual support giving. It would also broaden the range of skills available, and enable comprehensive orientation of new incumbents. The additional role can then develop the health promotion and health enhancement activities which currently comprise only 1% of the functional tasks of remote areas nurses (Bell et al 1997, Sealy 1997). This strategy could truly enhance the health of the community, rather than have nurses perpetually focusing on crisis resolution (Dunne et al 1994, Hoy et al 1997). And finally, the task of attracting

locum relief may be easier if the relieving incumbent was supported by an onsite practitioner, rather than being sent alone to adopt full healthcare responsibility to an unknown community.

Continuity of care maximises the providers' knowledge of individuals' health history and idiosyncrasies, and is vital to good health care, as GPs have long testified (McMurchie 1993, Van Damme et al 1994). It is more effective in terms of clinical outcomes and more cost effective to maintain staff rather than find regular replacements (AHMC 1994). Evidence provided by this study demonstrated that chronically high staff turnover rates are crippling efforts to deliver quality health care services in remote areas.

Efficacy of health care delivery will be hugely potentiated when an educated, confident and cohesive, well-supported and *stable* provider network is established. Until this occurs, the populations most in need of quality health care are receiving marginal care where the only care available is from a highly stressed, fatigued and under-resourced health professional. This is strikingly evident where the practitioner is in a state nearing complete physical and mental exhaustion, or grappling with trying to establish themselves in a new community.

It is evident that doctors have demonstrated strong resistance to the financial incentives offered to entice them to relocate to outlying areas (Johnston and Wilkinson 2001). The political invisibility of nurses perpetuates the deep-rooted cultural belief in the primacy of medicine over nursing (Lumby 2000). However, numerous studies have now demonstrated that for many acute and chronic conditions, the care provided by skilled nurses produces outcomes equal to those provided by doctors (Chang et al 1999, Rudy et al 1998). Nurses are also well qualified to provide health education, health promotion and behaviour modification programs that have shown higher efficacy than medications in improving health outcomes for many conditions (Rowley et al 2000).

## CONCLUSION

It is now well established that the health status of rural and remote populations is substantially inferior to their metropolitan counterparts. The low population densities of many communities make it difficult for these communities to attract a resident medical practitioner or for this to be a realistic option. Such communities rely heavily on nursing services for their immediate and long term health needs. Nurses provide the vast majority (87-90%) of health care in these regions, to a population whose health needs are diverse and complex. By ignoring nursing services, government rural health policies have also ignored the rights of communities to access appropriate health care.

The significance of nursing services on rural health outcomes for these communities has yet to be recognised by policy makers. Communities who receive their primary health care from nurses are presently seriously disadvantaged, not because their health service provider is a nurse, but because the nursing services are not resourced or supported. Nurses have long argued that organisational supports aimed at facilitating their role in health care delivery are continually overlooked at the expense of lucrative incentive schemes attempting to entice a reluctant medical workforce to relocate to rural and remote areas. Despite extensive public debate in the form of published literature and conference presentations testifying to the fact, the need for ongoing nursing education and skills maintenance is still not yet fully endorsed by employers and policy makers, and therefore not accorded a high priority.

Organisational support issues were described as the most pressing in this study. It is perhaps notable that extrinsic features such as working conditions, the temperatures in the outback, personal accommodation or financial rewards were not raised. The overwhelming theme behind all problems highlighted by rural and remote nurses consistently relates to lack of support for the nursing role in health care delivery. This widespread neglect made performance of clinical nursing skills and health promotion activities a daily challenge, described at times as 'impossible'.

While the Federal Government does not directly pay nurses' salaries, it is undeniably ultimately responsible for the health of rural and remote Australians. What is under dispute here is not the salary of nurses, but the calibre of health services provided to rural and remote populations. Nurses are important providers of health care across Australia, and are often the only providers in these areas where access to others is limited. Nurses have identified substantive problems in the health care delivery process, and have done so for decades, but have been systematically ignored.

The present medico-centric strategy is very much a blinkered approach which limits focus to *medical care* rather than *health care*, and access to doctors rather than access to appropriate health care services. This policy has damaged health services in rural and remote Australia, which have languished as a consequence, and has served to block access of rural and remote Australians to an effective health care source. This neglect has contributed significantly to poor rural health outcomes. The Federal Government must reorientate its present inefficient and ineffective strategy, broaden the focus, and support nursing services if their rhetoric 'to improve rural health care' is genuine. The Federal Government obligation to advance the health of rural and remote communities is not only political, in a climate of rural discontent, but moral, based on justice and a sense of ensuring a 'fair go for all Australians'.

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## RESEARCH ROUNDUP A summary of research reports from nursing and medical journals

### APGAR SCORES STILL RELEVANT

The 10-point Apgar scoring system is still the best method for assessing the condition and prognosis of newborn infants, nearly 50 years after it was introduced, according to new research. Data from 150,000 live born infants delivered at 26 weeks of gestation or later between 1988 and 1998 was analysed. The researchers compared the infants' Apgar scores with paired umbilical blood pH values to assess which method best predicted neonatal death during the first 28 days after birth. The study showed very low (0-3) five minute Apgar scores were better predictors of the risk of neonatal death than abnormal umbilical artery blood pH values (7.0 or less).

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Casey, B., McIntire, D. and Leveno, K. 2001. *The continuing value of the Apgar score for the assessment of newborn infants*. New England Journal of Medicine. 344(7):467-471.

### EXERCISE IMPROVES MOOD

Even short periods of aerobic exercise can produce substantial improvement in mood in patients with major depressive disorders, German researchers report. The researchers took a group of 12 people with moderate to severe depression and helped them through a 10-day training regime consisting of 30 minutes of daily treadmill walking. The study showed the individuals' depression scores - based on the Hamilton rating scale - improved significantly after the exercise regime. Both subjective self-assessment and objective psychiatric evaluation of symptoms confirmed the improvements.

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Dimeo, F., Bauer, M., Varahram, I., Proest, G. and Halter, U. 2001. *Benefits from aerobic exercise in patients with major depression: A pilot study*. British Journal of Sports Medicine. 35(2):114-117.

### WEB LACKING IN TERMS OF HEALTH INFORMATION

Consumers using the Internet may have difficulty finding complete and accurate information because the coverage of key health topics is poor and inconsistent and high levels of literacy are required to comprehend web-based content, according to new research. The research examined the efficiency of 10 English-language and four Spanish-language search engines and the quality of information provided on 25 health websites. Researchers found that only 34% of the links generated when four search terms - 'breast cancer', 'childhood asthma', 'depression' and 'obesity' - were entered into the search engines were relevant, and less than a quarter of the first pages of links generated led to relevant content. The

authors say that although thousands of pages of material related to key questions, there were substantial gaps in the availability of key information. Over half of the English-language website reviews revealed conflicts in the information provided, including treatment, diagnosis, definitions, and risk factors.

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Berland, G., Elliott, M., Morales, L., Algazy, J., Kravitz, R. Broder, M., Kanouse, D., Munoz, J., Puyol, J., Lara, M., Watkins, K., Kang, H. and McGlynn, E. 2001. *Health information on the Internet: Accessibility, quality, and readability in English and Spanish*. Journal of the American Medical Association. 285(20):2612-2621.

### PATIENT OUTCOMES LINKED TO NURSE STAFFING

The number and mix of nurses at a hospital affects the quality of care that patients receive, a new study confirms. Researchers from the Harvard School of Public Health in Boston analysed data from more than five million patient discharges from 799 US hospitals in 11 States. The study found a strong relationship between nurse staffing and five specific outcomes: urinary tract infection, pneumonia, shock, upper gastrointestinal bleeding, and length of stay. Higher numbers of RNs were associated with a 3% to 12% reduction in the rates of these adverse outcomes.

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Needleman, J., Buerhaus, P., Mattke, S., Stewart, M. and Zelevinsky, K. *Nurse staffing and patient outcomes in hospitals*. 2001. US Department of Health and Human Services Health Resources and Services Administration. The report is available at: [www.bhpr.hrsa.gov/dn/staffstudy.htm](http://www.bhpr.hrsa.gov/dn/staffstudy.htm).

### THE HEAVY TOLL OF CPR

Critical care nurses experience symptoms of critical incident stress (CIS) as part of their physiological and psychological responses to cardiopulmonary resuscitation (CPR), according to South Australian research. The study examined the responses of 31 critical care nurses at a major metropolitan hospital in Adelaide to a questionnaire designed to identify distress experienced following CPR. The study showed almost half the nurses questioned had clinical manifestations of CIS in response to performing CPR - including sleep disturbances, anxiety, increased startle, withdrawal, difficulties in concentrating and excessive fatigue.

#### Reference

Laws, T. 2001. *Examining critical care nurses' critical stress after in hospital cardiopulmonary resuscitation*. Australian Critical Care. 14(2):76-81.